

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1026—VOL. XXV.]

London, Saturday, April 21, 1855.

[PRICE 6d.

M. B. JAMES CROFTS, MINING BROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, TRANSACTS BUSINESS,
in BUYING and SELLING, for immediate cash.
DIVIDEND MINES, well selected, are the best of any known investments—paying
from 15 to 20 per cent. per annum in dividends. The choice of NON-DIVIDEND
MINES for speculation requires careful discrimination.
Mr. Crofts transacts every description of business connected with the STOCK
EXCHANGE at the same rates of commission as charged by the brokers of that
establishment.—Bankers: The Commercial Bank of London.

M. R. JAMES LANE has REMOVED from 33, to 29, THREAD-
NEEDLE STREET, and continues to DEAL in DIVIDEND and LEADING
MINES, at the closest market prices; and especially in the following:—
Alfred Consols Eaglebrook Sortridge Consols
Ballewides United Gornamens South Carron Trewetha
Bedford United Great Crimis South Caronon West Cardon
Boscan Hington Down South Tamar West Providence
Brynd Hall Marke Valley South Cremer West Sortridge
Carnorth Molland Stray Park Wheal Arthur
Condurow North W.H. Trelawny Sheba Wheal Love
Dawrode North W.H. Robert Tamar Consols Wheal Mary Ann
Devon Great Cons. Rosewarne Tincrot Wheal Trelawny
East. Wheal Russell Rheidol United Treborth Wheal Wrey

THE ATTENTION of those having unemployed capital is especially
directed to the present LOW PRICES, and most FAVOURABLE OPPORTU-
NITY, at which INVESTMENTS in DIVIDEND and MANY PROGRESSIVE
MINES may be made, attendant upon the depression caused by the uncertainty of
the settlement of the war; and the further impetus given to a decline in prices from
the forced sales at auction, whereby shares in many bona fide and promising mines
have fared the levelling influence of those that have had no pretensions to merit.
Amongst these promising mines so disparaged, many lately have been in demand
at improved prices, which their merit fully warrant; and there are many more in
the same category (in some instances with machinery of greater value than the price
of the shares), under good management, with accounts properly kept and honestly
verified, which cannot fail amply to repay for the purchasing. A judicious selection
is alone conducive to success; and to obtain such, advice should be obtained from
those who are disinterested, yet who, from constant communication with local agents,
having facility of obtaining particulars, are well informed of the merits and demerits
of such property in which an investment is sought.

Mr. BRONCLEY will forward particulars of such mines (based upon the opinion of
experts of repute) as possess sufficient prospects to admit of those investing looking
forward with every reasonable certainty for a profitable issue at no very distant period.

Mr. BRONCLEY, having peculiar facilities of procuring shares, will be ready to receive
communications from those desirous of transacting business in ANY OF THE
MINES mentioned in the Mining Journal.

SALES, &c., EFFECTED in every description of RAILWAY, MINING, CANAL,
and INSURANCE SECURITIES.

FOR SPECIAL SALE—

Alfred Consols 8 Sou. Providence 20 Wheal Wrey 25 Wheal Edward
5 Trelawny 5 West Providence 5 Wheal Trelawny 10 Wheal Arthur
2 South Carron 16 Bland Lanarth 50 Sortridge 20 Treborth
3 Great Alfred 26 North Croft 50 Vale of Towy 10 Treborth

For the guidance of parties in the country, a WEEKLY LIST OF PRICES, with
marks, will be forwarded gratuitously every Wednesday, on publication.

Mining Offices, 2, Pinner's-court, Old Broad-street, London.

NOTICE OF REMOVAL.—Mr. W. LEMON OLIVER, STOCK
AND SHAREBROKER, has REMOVED to No. 4, AUSTINPIERS, OLD
ROAD STREET, CITY. (Sworn Broker.)—April 20, 1855.

REMOVAL.—Mr. HENRY SIBLEY, STOCK, SHARE, AND
MINING AGENT, has REMOVED from No. 3, Old Broad-street, to No. 4,
MICHIN LANE, CORNHILL.

M. R. HY. GOULD SHARP TRANSACTS BUSINESS in every
description of BRITISH and FOREIGN SHARES:—

FOR SALE, or any part:—
20 West Sortridge, 1a. 6d. 100 Liberty, 2a. 10d. 50 Molland, 2a. 3d.
50 Gaukis, 2a. 50 Great Cambrian, 1a. 100 North Hington, 1a. 9d.
50 Sortridge Cons., 25d. 50 Great Sortridge, 25d. 50 Swapool, 25d.

WANTED:—
20 Porsone Cons., 10s. 6d. 50 Wildberg, 30s.

List of prices forwarded on application, and every information given.
Cobly Hall Chambers, Bishopsgate-street, London.

M. R. GEO. SPRATLEY has FOR SALE the following SHARES:
100 Boscan, 100 Potimore, 4s. 100 Nant. and Penr., 25s.
50 South Devon, 25s. 50 East Tamar, 7a. 6d. 50 Bedford United.
50 South Cremer, 25s. 2 West Providence. 2 Great Alfred, 25s.
50 Borrington, 1a. 6d. 1 Wheal Buller. 100 San Fernando.
50 Tamar Maria, 2s. 50 Cilgaf and Wentworth. 20 Linaries.
5. Welsh Fotos. 4 North Basset. 18 Speare Consols, 25s.
WANTED.—1 South Cardon, 100 Wheal Langford, 20 Carnorth, 1 Rosewarne,
20 South Tamar, 2, Winchcombe-buildings, London.

JAMES F. BODDY, No. 15, OLD BROAD STREET, LONDON,
TRANSACTS BUSINESS in the undermentioned, or any other MINES quoted
in the general List of the Mining Journal; and will be happy to forward any information
upon application, likewise a correct list of the prices.

Alfred Consols East Bick Craig Nor. Hington Cons. Tremollett Downs
Bogd Consols East Boscan Potimore United Mines
Boscan Great Consols Par Consols West Bassett
Boscan Great Crimis Phoenix Wheal Arthur
Boscan Great Golgoth Polberro Wheal Friendship
Boscan Great Golgoth Pembr. & E. Crimis Wheal Golden
Boscan Great Golgoth Gilmar Wheal Jane
Boscan Great Sheba Consols Gola (Limerick) Wheal Mary Ann
Boscan Great Wheal Alfred Pendene Consols Wheal Wrey
Boscan Great Rough Tor Quintrell Downs Wheal West Alfred
Boscan Great Sortridge Bix Hill Wheal Crimis
Boscan Great Sortridge Herdofoot Rorrington Wheal Polberro
Boscan Great Sortridge Hington Down Round Hill Wheal Alfred
Boscan Great Sortridge Honkock South Tamar Wheal Lemon
Boscan Great Sortridge Marke Valley St. Aubyn and Grylls Wheal Phineus
Boscan Great Sortridge Marke Valley Stray Park and Cam- Wheal Usay
Boscan Great Sortridge Marke Valley borne Vean Wheal Venion
Boscan Great Sortridge Marke Valley Wheal Whiteleigh
Boscan Great Sortridge Marke Valley Wheal Wrey
Boscan Great Sortridge Marke Valley Wheal Zion
Boscan Great Sortridge Marke Valley West Phoenix
Boscan Great Sortridge Marke Valley West Sortridge
Boscan Great Sortridge Marke Valley West Wh. Friendsh.
Boscan Great Sortridge Marke Valley Wheal Gill
Boscan Great Sortridge Marke Valley Wheal Ludcott
Boscan Great Sortridge Marke Valley Wheal Surprise
Boscan Great Sortridge Marke Valley Yeoland Consols

WANTED.—Sortridge Consols, Bedford United, East Gunnis Lake, Wh. Langford,
with French, New South Wales Coal, Trewetha Consols, Carron, and others.
N.B. As so many parties have applied for the Cost-book Laws and Regulations,
F. Boddy will be happy to forward a correct printed copy to any part of the king-
dom, on receipt of six postage stamps.

Stock Exchange business transacted for the usual commission.

Bankers: Sir John Wm. Lubbock, Bart., and Co.

DOTALLACK TIN AND COPPER.—Mr. W. CHARLES has still
ONE SHARE TO DISPOSE OF in these valuable MINES. Mr. W. CHARLES
SHARES FOR SALE in the following MINES:—viz., Great Crimis, West Par-
ton, East Cardon, Cayton, Langford and Baring, Alton, Chay, Wrygian, St. As-
twell, and others. —27, Austinpiers, April 20, 1855.

MINING INVESTMENT.—T. FULLER AND CO., 51, THREAD-
NEEDLE-STREET, LONDON, continue to ADVISE CAPITALISTS upon
a description of MINING PROPERTY, and beg respectfully to call attention to
the favourable opportunity of PURCHASING in both BRITISH and FO-
REIGN DIVIDEND and PROGRESSIVE MINES, a careful selection of which cannot
be guaranteed all who invest, many of them paying profits of from 15 to 20 per cent.
F. Boddy and Co., being in daily communication with agents of practical ex-
pertise of the principal mines of Devon, Cornwall, and Wales, are in a position to
supply every information, either personally or by letter, and all instructions promptly
attended to. Every kind of business transacted upon Stock Exchange principles.

N.B. Office hours from Ten till Five o'clock.

MINING INVESTMENT.—Mr. CHARLES GURNEY, No. 4,
CORRECT COURT, GRACECHURCH STREET, LONDON, will be happy
to PURCHASE or SELL SHARES, on the usual commission, in all DIVIDEND
MINES, now paying from 15 to 20 per cent.; or in those working under present
and future conditions.

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and future conditions.

M. R. HERRON is a BUYER of the FOLLOWING SHARES:—

10 Gilmar 5 West Providence 1 South Bassett 50 United Mexican
5 Wheal Charlotte 5 Great Alfred 10 North Bassett 50 Tamar Consols
5 Craddock Moor 49 St. Day United 50 South Carron 50 Wheal Edward
10 East Wheal Rose 1 West Cardon 50 N. Vale of Towy 50 Kilbricken
5 South Carron 1 South Cardon 5 Cobre 10 Cock's Kitchen
30 Treborth 1 South Frances 5 St. John del Rey 50 Orsodall

Mr. HERRON is a SELLER of the following:—

50 Molland 20 Trelogan 50 Lewis 30 Treleigh
40 Cubert 20 Sortridge Cons. 2 Wheal Reeth 15 North Downs
2 Trelewany 50 Tary Consols 50 Wheal Polard
10 Wheal Ventan 50 Kilbraine 30 Halsmanning 20 Great Baddern
20 Wheal Harriett 5 Hington Down 3 Trevikey 50 Treborth
5 Butterdon 10 South Tamar 20 Thomas's United 5 Stray Park
100 Borrington 5 Herodsfoot 30 Cwm Darren 10 Pen-y-Gell
5 North Trelewany 10 Alfred Consols 20 East Froncorth 3 East Bassett
5 Wheal Uny 20 Wheal Golden 5 West Alf. Cons. 5 Eaglebrook
10 Kelly Bray 10 Trewetha 30 East Tamar 10 Bedford United
5 Wheal Zion 20 Brynfall 10 Merllyn 30 Orsodall

A correct list of prices application.

12, Clementi's-lane, Lombard-street, April 20, 1855.

**M. R. JOSEPH JAMES REYNOLDS, STOCK AND SHARE-
BROKER,** No. 21, THREADNEEDLE STREET, LONDON.

BUSINESS TRANSACTED in every description of BRITISH and FOREIGN
STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

**M. E. POWELL AND COOKE, DEALERS IN MINING
SHARES,** No. 8, HERCULES CHAMBERS, OLD BROAD STREET,
LONDON.—The above continue to DEAL in the SHARES of all the leading DIVI-
DEND and good PROGRESSIVE MINES.—April 20, 1855.

M. R. B. LAMBERT TENDERS HIS SERVICES to PARTIES
INVESTING in or SELLING MINING PROPERTY. By the soundness of
the information to which he has access, and the bona fide character of the under-
taking to which he directs attention, his constant endeavours are to secure the sup-
port of his clients.—Offices, 3, Hatton-court, Threadneedle-street, City.

**M. R. LELEAN, 4, CUSHION COURT, OLD BROAD STREET,
LONDON.**—BUSINESS TRANSACTED in every description of BRITISH
STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

**M. E. SPARCO AND CO., MINING AGENTS AND
SHAREBROKERS,** 70, CORNELL, LONDON.

Gratuitous advice will be afforded to any gentleman requiring information respecting
mining investments, upon application personally or by letter.

M. R. JAS. T. TREMAYNE (late accountant in the firm of Robert
and Son, merchants and smelters, of Truro) begs to inform his friends and the public
that he has COMMENCED BUSINESS at the undermentioned address as a MINING, SHIPPING, and GENERAL COMMISSION AGENT. Having
had ten years' experience in general business in the above-named firm, he hopes to
meet with support from his Cornish friends; and he begs to assure them that any business
entrusted to him shall meet with due care and attention.

Mr. Jas. T. Tremayne has made arrangements for being regularly furnished with the best information regarding the mines of Devon and Cornwall.

Agent for Seawater Saw Mills and Turning Factory, Truro.

1, Queen-street, Cheapside.

M. R. W. H. BRUMBY, STOCK AND SHAREBROKER,
No. 1, BRIDGE STREET, BATH, has BUSINESS TO TRANSACT in the
following MINES:—Alfred Consols, Wheal Zion, Great Alfred, Castle Dinas, West
Poldro, Dairhaw, Nant-y-car, Boscan, and South Bedford.

N.B. No notice taken of any but positive offers.

M. R. FRANCIS RIDGMAN, MINE SHAREBROKER,
TAVISTOCK, DEVON. 20

M. R. T. TYACK, MINE SHAREBROKER, AUCTIONEER, &c.,
CAMBORNE, CORNWALL. 21

M. R. E. GOMPERS, MINING SHARE DEALER,
98, GRACECHURCH STREET, LONDON. 22

**M. R. ADAM MURRAY, F.G.S., CONSULTING MINING
ENGINEER,** 76, CORNELL, LONDON. 23

M. R. HOPKINS, MINING, MINING MACHINERY, &c.—PLANS and SECTIONS
MADE TO ORDER, with NEATNESS and PROMPTITUDE, by Mr. EVAN
HOPKINS, Jun., 32, Thurloe-square, Brompton. 24

CAPT. THOMAS DUNN of TAVISTOCK, undertakes to INSPECT,
REPORT, and SURVEY any MINES or MINERAL PROPERTY in EN-
GLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management
of any mine or mines in the neighbourhood of Tavistock. 25

**M. R. RICHARD MICHELL'S MINING, AUCTION, and
GENERAL COMMISSION AGENCY OFFICES,** FORE COURT, REDRUTH. 26

Mines inspected, and information punctually furnished.

M. R. W. T. RICKARD, F.C.S., ANALYTICAL CHEMIST,
Assayer of Copper and the Precious Metals, by Special Appointment of
the Chilian Government, ACORN VILLA, FORD ROAD, OLD FORD, LONDON. 27

COBALT AND NICKEL.—ALFRED SENIOR MERRY,
REFINER and PURCHASER of COBALT and NICKEL ORES, and
ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM. 28

NICKEL AND COBALT REFINING, AND GERMAN SILVER
WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN
HARKER begs to inform the Trade that he has the following articles for sale:—
REFINED METALLIC NICKEL. OXIDE OF COBALT. WIRE, &c.
REFINED METALLIC NICKEL. GERMAN SILVER.—IN INGOTS, SHEET,
NICKEL AND COBALT ORES PURCHASED.

**GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND
CHEMICAL WORKS.** NEAR STOKE-UPON-TRENT, STAFFORDSHIRE. 29

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

**IBBOTSON BROTHERS AND CO., SHEFFIELD, STEEL AND
FILE WORKS;** also COMMISSION MERCHANTS for the SALE and PUR-
CHASE of every description of MACHINERY and MACHINERY, and every article
used by engineers, too numerous to enumerate in an advertisement. 30

**M. R. TREDINICK, BROKER and DEALER in BRITISH
MINES, SHARES, and STOCKS in GENERAL,** PUBLISHES, from the
commencement of May next, a WEEKLY CURRENT LIST OF PRICES of a judi-
cious selection of DIVIDEND, PROGRESSIVE, and some ADDITIONAL SPECULATIVE
COMPANIES, with other statistical and valuable information, including his *Synopsis of British Mining for the past Nine Years*. Subscribers, £2 2s. annually, including
postage; or 1s. per List.

Brokerage Office, 4, Austinpiers, London.

Inspecting and Mapping Office, Camborne, Cornwall.

Publishing Office, 19, Great St. Helen's, London.

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M. R. TREDINICK begs to inform his correspondents and the
public that their INSTRUCTIONS to INSPECT and REPORT upon parti-
cular mines in Cornwall and Devon must be FORWARDED to CAMBORNE, CORN-
WELL, until the 5th May next, after which to 4, Austinpiers, London, as usual. 24

In consequence of numerous engagements, Mr. TREDINICK cannot attend to in-
structions forwarded to him unless a cheque or post-office order for Two Guineas be
enclosed in the order to inspect, upon receiving which no additional charge will be
made, excepting travelling expenses to the mine.—London, April 20, 1855.

INNEY CONSOLS MINING COMPANY.—Notice is hereby given,
that in order to give full effect to Art. No. 2 of the Rules and Regulations of
this company, whereby it is provided: "That no person shall be recognized as a
shareholder in the company, or in any way interested in the same, until he or she
shall have been duly

Original Correspondent.

TREATMENT OF GOLD-BEARING MINERALS, &c.

SIR.—Mr. Mitchell, in his paper on this subject, inserted in the last Journal, makes allusion to my observations, and has endeavoured to prove that my opinion on the non-existence of *mineralized* gold in nature, and that it is always found in the *metallic* state, is not correct. He appears to have come to this conclusion because gold has been found so extremely divided as to be often in an impalpable and invisible state, and sometimes in solution, or chemically combined with an alkali.

Those who have read my reports on the treatment of auriferous ores, and especially my observations on some of the gold establishments of South America—my first edition on *Geology and Magnetism*, in 1843, and my report on the Isthmus of Panama and the Gold Regions, will find repeated allusion to rocks being, as it were, saturated with gold in the most minute degree of dissemination; also, that the gold in this state cannot be rendered available, inasmuch as it is found perfectly impalpable, and would be carried away by the most delicate stream of water; besides the total quantity per ton of this very minute gold, or gold held in an alkaline compound, in minerals and rocks, seldom, if ever, exceeds 5 dwt. At all events, be the quantity what it may, an expert native gold-washer can at all times show a yellow *pinto* in his batea from all the auriferous compounds known in South America—viz., from quartz, iron and copper pyrites, blende, galena, and from all the ferruginous varieties, containing, either in the rough, or in the residue, only 4 dwt. per ton, and that by mere grinding and washing. Small as the resulting produce must be in a sample (say, 10 lbs. weight), yet we find it to be not a mineral, in the ordinary sense of that term, but impalpable metallic gold, which could not have been separated by simple mechanical means; had the gold been combined chemically with a mineralising compound. I am not at all surprised at Mr. Mitchell not being able to obtain gold from finely-ground pyrites by washing; I should be astonished if he did. Even amongst the expert gold-washers we find a difference in their capabilities; and when we require to test stuff of low value, below 5 dwt. per ton, we select new bateas and the best practised hand. I have seen many good tinner, even who were accustomed to vaning, unable to show gold in pyrites containing 1 oz. per ton; it is not, therefore, to be wondered at that persons who have not had the opportunities of carrying on works on large scales, and of seeing how things are done, and how gold is obtained from all kinds of compounds, at a profit, by simple mechanical means and low produce, should be misled in such matters.

It is the want of a thorough practical knowledge of the subject in the great field of operation—to know what are, and what are not, commercially and practically speaking, gold mines worthy of that term—which is the reason why these schemes have been undertaken and encouraged where no gold mines exist. I have not seen a single letter, nor a paper, attempting to hold up the prospects of British gold mining, &c., by a person who has been in charge of a real gold mining establishment: such a person would have known that *pure* gold is never found amongst metallic minerals, as was stated to have existed in Devon and Wales, especially in the neighbourhood of copper or lead. A practical man could not be deceived in the quality at least.

If Mr. Mitchell maintains that a metal held in solution is a mineral, we need not discuss the question further, as I have endeavoured, in my papers and printed works, since 1837, to prove that all substances are more or less in that state before they crystallise, or become solids. But we must have a new definition of the term *ore* before we can admit a mere solution as an equivalent in meaning to the word *ore*. Miners, at all events, consider the term *ore*, as something solid, apart from what is held in solution, hence the reason of my stating that all available gold, which is more or less solid, and obtained from nature, has been found always in its metallic state, and not as a mineral in the ordinary sense of that term. I have seen the black, the green, and the yellow varieties, in New Granada, and found the former, notwithstanding its black coating, as much of a metal as the latter.

Mr. Mitchell states that he was the first who announced, in England, the possibility of the existence of gold otherwise than as a solid metal, in 1846 and 1848. I beg reference to my first edition, printed in 1843 (page 18), on all metals, including gold, being held in rocks in solution, and precipitated therefrom in joints, fractures, &c.; also, on the production of *mass gold*, and in arborescent forms, &c. (page 42). Efflorescent and capillary gold, found on the walls of old workings, &c. (page 53). I could quote many papers written during 1836-7-8, in South America, to show that this subject has engaged my attention for many years; also, other papers on the development of gold during the internal and external disintegration of auriferous granite, &c., published many years ago in your Journal, and further described in the second edition of *Geology and Magnetism* (p. 53 and Plate VIII). I have already stated that calcining and amalgamating were early abandoned, in consequence of our finding, by many experiments on thousands of tons treated, that we could obtain the metal in larger quantities, and cheaper, by simple mechanical means than by the former method. Many clever men, and M. Boussingault amongst the number, thought they could have introduced a better and more refined chemical method than the improved mechanical one now adopted; but all found that what appeared almost perfect in the laboratory experiments did not prove so when put to the test of practical operations. I have repeatedly explained that the auriferous pyrites contains palpable and impalpable gold, and that after the extraction of the former the residue is laid aside, to allow the natural operations to transform the impalpable gold into an available state, as being by far the cheapest and the most effectual means of obtaining it at a *profit*, the latter being, of course, a *sine qua non*. We proved, in our laboratory experiments (which were conducted on a comparatively large scale, and in a very superior manner), that no refuse in a state of *pyrites* could exist without containing gold, that nothing short of a complete dissolution of the sulphur could liberate all the gold with which it was saturated, and that the contents of the residual *pyrites* were constantly the same, bulk for bulk.

None of the new inventions, or methods, for extracting gold have been found of any use in practice; and, after a considerable amount of expenditure and public patience, we find the companies in California, the United States, and Australia, introducing the stamp and blanket system of crushing and concentrating. So much for trusting to assumption and theory, without a sufficient amount of practical experience. I do not mean to say that we cannot improve the established process, but I do maintain that it is necessary to be acquainted with the subject practically, and make the experiments at the gold mines, to prove the merit of any new methods.

E. HOPKINS.

WHY HAS GOLD MINING FAILED?

SIR.—This question is again put by a correspondent in your last Journal, in a more extended form, and soliciting a reply. There can be no difficulty whatever in answering such a question; the reasons are the same which caused the failure of two-thirds of what are called mining undertakings, and may be divided as follows:—

1. Many of the gold mines had no existence excepting on paper, specimens, and assays.

2. The pure quartz veins, which are only sparingly impregnated with gold, at best, in a gold country, have been bought at a high price, and the most crude and imperfect method of crushing and extracting introduced, in places where materials and labour were excessively high, although such veins, in cheap countries, have been long found unprofitable to companies.

3. Not only have the unprofitable quartz veins of rich gold regions been taken up at an extravagant rate, but also the quartz veins of England and other places, in which the gold is still more rare, irregular, and confined to a few isolated patches.

4. The Gongo Seco, Morro Velho, Marmato, and one or two others that have been rendered profitable by companies, are not quartz veins, but auriferous pyrites and iron mines schist, the only varieties of auriferous veins which have been found profitable on a large scale.

5. The product per ton of the profitable gold mines is so small, that, had it not been for the quantity of staff obtainable, its average uniformity in value, the economical and judicious arrangements in the system of extraction, and controlling practical experience, these mines even would not have made profits. Had any of them been worked in the manner in which some of the new gold speculations have been attempted, they would have been ruinous undertakings to the shareholders.

6. Some of the moderately good gold mines have been frequently all but jeopardised, through unfortunate changes, and the appointment of visionary and over-meditated individuals.

7. Private companies are able to determine on the spot what will pay, and what will not; they know when to stop and who to employ, and will not allow distant parties to interrupt and clog them with their friends, &c.; hence the reason why the diggers succeed when working on their own account.

8. However, this so-called success requires some qualifications. For instance, the colony of Victoria produced, in round numbers, last year 8,000,000*l.* sterling, by the united hard labour of 67,000 diggers, according to the official accounts. This product is divided amongst the mass, would only leave to each person about 4*l.* per week, whereas, if employed by companies, each would have to be paid at the rate of 7*l.* at least, and the license fees besides. How could a profit be made to companies under such circumstances, in the absence of all the usual conditions required for such purposes? Many private companies and diggers, who are said to be making large profits, are actually losing.

9. Again, when we consider that nine-tenths of the companies never give any attention to the state of things, nor to what was required at the commencement of such enterprises, but only rendered them subservient to their own ends, abused their trust,

broke faith with the proprietors and their agents, retained and misappropriated the funds, we need not be surprised that the so-called gold mining has failed.

10. Finally, in reply to the query No. 1 of your correspondent, I would suggest that no mine should be commenced or undertaken which does not present reasonable prospects of paying cost; and that no committees, directors, or secretaries, should be allowed to have such a control as would endanger the welfare of the mines, by mismanagement, misrepresentation, or selfish appointments; but that the management should be made truly for the benefit of all concerned, and not for the exclusive interest of the so-called managers, to the injury of others. Unless this be carried into effect, prudent men, whether as capitalists or as agents, ought to avoid such companies.—April 17.

Evan Hopkins.

WHY HAS GOLD MINING FAILED?

SIR.—A correspondent in your last Journal ("E. E.") makes some enquiries as to the failure of gold mining in different parts of the world. With your permission, I will repeat his questions, and append some information relative thereto, the result of my experience, and which may prove interesting to many of your readers.

11. Under the present circumstances, assuming that each company has an honest committee of management, what is the best course to be pursued by the committee and the shareholders?

To actually raise the first capital stated in the prospectus to its full amount, or more when required, and carry out the plants upon the systems the practical parties first sent out advised. These parties are far more likely to accomplish correctly the proper system required, from their acquired knowledge of overcoming difficulties in new countries, than those only put to them recently.

The Californian companies that have obtained locations have all proved that there is gold in the quartz sufficient to pay well, when the plants are established to reduce not less than 50 to 100 tons every 10 hours.

12. What is the reason of the failure of gold mining companies, when private companies and individuals make enormous profits from gold digging?

The small amount of capital expended really on the works to that required practically. The cost for mining and plant erecting being eight times more than in England or Europe generally. The amounts required can now be calculated within a fraction, by finding the costs of such matters from the reports of companies who have built recent works on the banks of the Thames for reducing ores. For mining costs, from the work lately published, called "Cornwall," its Mines, Miners, and Scenery. The gold has been combined chemically with a mineralising compound. I am not at all surprised at Mr. Mitchell not being able to obtain gold from finely-ground pyrites by washing; I should be astonished if he did.

Small as the resulting produce must be in a sample (say, 10 lbs. weight), yet we find it to be not a mineral, in the ordinary sense of that term, but impalpable metallic gold, which could not have been separated by simple mechanical means.

13. Under the present circumstances, assuming that each company has an honest committee of management, what is the best course to be pursued by the committee and the shareholders?

To actually raise the first capital stated in the prospectus to its full amount, or more when required, and carry out the plants upon the systems the practical parties first sent out advised. These parties are far more likely to accomplish correctly the proper system required, from their acquired knowledge of overcoming difficulties in new countries, than those only put to them recently.

The diggers, *alias* the occupiers of the "claims" of 16 feet square of alluvial soil, are those who have made money in about the following proportions:—

12 in 100 have made fortunes.

78 in 100 have made good livings.

6 in 100 have lost money and time.

4 in 100 have lived on the rest.

14. Any suggestion likely, if acted upon, to improve the position of the companies, and to restore public confidence in mining?

Let 20 shares be the amount which entitles a person to be named as a director to the board in England; let each director be retired after three years' service, or be re-elected, if advisable, by the shareholders.—No share to be sold at a premium previous to the first dividends paid out of profits.—Public auditors and accountants.—Legal limited liability of shareholders.

15. What are the real prospects of gold mining in Virginia?

Good returns may be expected from gold mining in the State of Virginia. Time, however, must be allowed, to all others, for establishing plant and opening the mine to a proper depth and length. The capital required will be about \$300,000, or \$60,000, per 300 yards.

In Virginia, with the produce as low as 50*grs.* per ton of 2000 lbs., the costs for mining are about 149*grs.*, and for amalgamating about 145*grs.*

16. Is there any means of employing the unexpended capital of some of the gold mining companies, so as to "make something" out of gold mining companies, whether in England, Granada, or Virginia?"

Other than as above indicated, the money can be put out at interest, at the following rates:—In England, 3*per cent.* per annum; North America, 7*per cent.*; South America, 5*per cent.*; California, 2*1/2* *per cent.* per month; English mines pay, with care in selection, about 12*per cent.* per annum.

Gold mining can be shown to yield, when the concerns are thoroughly established, some 30*per cent.* on the daily expenses, or 24 hours, for five days out of seven. In California, when the gold holds 1*3/4* oz., or 840*grs.* per ton of 2000 lbs., the costs for mining are about 149*grs.*, and for amalgamating about 145*grs.*

17. Gloucester-street, Kensington. John H. CLEMENT, a Shareholder.

18. Gold mining companies, in the old southern states of America, make money on ours giving the following results:—The Russell Mining Company, of North Carolina, with ores giving gold to the value of 8*l.* 3*d.* per ton. Louis Mining Company, ditto, 5*l.* 9*d.* per ton. Those companies whose ores give gold to the value of 1*3/4* oz. per ton pay a dividend of 20*per cent.* per annum. The costs per ton for mining and amalgamating are 8*l.* 3*d.* per ton. All the above-named companies are fully aware that they only extract 50*per cent.* of the actual content.

J. H. C.

GOLD QUARTZ MINING IN CALIFORNIA.

SIR.—In your Journal of the 14th inst., I noticed a letter from one of your correspondents, signed "E. E.," asking for information on certain points connected with gold quartz mining. I have had considerable experience in California mining, and beg to offer some remarks in answer to "E. E.," the results of my observations there.

Query 1. As affairs at present exist, and giving credit for the assumption required, I consider that the shareholders should call upon their respective committees for a complete detailed statement of their financial conditions, not only at the present time, but tracing them through since the period when their money was first subscribed; at the same time, the shareholders should insist on knowing the nature and terms of any and all the negotiations that may have been considered between the committees and mining proprietors and agents in the countries they have respectively selected as fields of operations. And let them, also, nominate a practical man, of uncompromising integrity, to proceed to their respective localities, to examine and report upon the reality of the prospects there held out.

2. In propounding this query, it is evident that "E. E.," in common with most persons in this country, has completely mistaken the distinction between quartz mining (for which the English gold mining companies were established) and gold digging. The truth, if it has been told, has never been believed; it is so difficult to bring conviction to bear against hope. I have heard it constantly enquired, why should ignorant, hard working labourers acquire fortunes by successful gold digging, when English capital and skill only procure to themselves disgust at home and derision abroad? The reason of this apparent anomaly, Sir, is this—Gold in its metallic state exists in California, either embodied in the substance of quartz rock, or mechanically mingled with the constituents of the alluvial detritus and gravel beds. In the first instance, the average amount of gold in the hard stone is singularly small, and, to be obtained, it is necessary to submit the vein of stone to a regular mining and metallurgical operation, equally expensive and unsatisfactory. Moreover, if gold be found in one part, or section, of a ledge of quartz, it does not follow that the adjacent portions of the rock will be auriferous at all; so that the labour and expense of operating upon a great quantity of rock must be incurred to procure the gold which is contained in but a small quantity. Now, in the second case, the thing is different; gold in the alluvial deposits is actual, and in many instances very plentiful, and requires but the separation of running water in order to be freed at once of its baster companions—viz., simple sand, pebbles, and dirt.

For quartz mining, the cumbersome appliances of heavy machinery, prejudiced and ignorant agents, and pompous committees, are required; for gold digging, the sturdy arms and resolute endurance of the poor wanderer in the wilds of California, with a little tact and pluck, will surely gain the prize of a well-earned pile of gold. I know many instances in California of private individuals who have embarked in quartz mining, and now have to deplore their wasted time and exhausted fortunes. Refer to the immense lists of the shipments of gold from that land during the past four years, the amounts of which in total exceed 40,000,000*l.* sterling; and of this enormous sum, how much has been on account of gold raised from quartz? I am sure I am greatly overstating it if I say not 50,000*l.*; all the rest is from the labour of the poor exiled, contemptible outcast from civilisation, the gold digger.

Other reasons, in reply to this query No. 2 of "E. E.," he may learn by perusing the letter of "An Old Miner" on this subject, which appeared in your Journal of March 24, and which letter I recommend to his attention.

3. Of what use is it to offer suggestions for improvement? Who cares for them? The public naturally likes to be galled; and, so long as it is offered the chance of a rapid fortune without work, so long shall we be cursed with stock jobbing humbug, to the ruin of many a worthy family, and the embitterment of many a declining day. But if the shareholders are determined to improve their prospects, let them compel their committees to discharge their accounts, and reveal the mysteries they have concealed, in the manner I have explained in my answer to "E. E."s" first query.

4. My experience being confined to California, I cannot presume to discuss Virginian prospects.

5. I reckon that the only way of making anything out of the "unexpended capital" (?) of some of the gold mining companies, is to divide it *pro rata*, among the gullies-to-wit, the shareholders.—April 18.

A RETURNED CALIFORNIAN.

GOLD IN ENGLAND, AND ITS TREATMENT.

THE CAUSE OF FAILURE OF BERDAN'S AND PERKES' MACHINES EXPLAINED.

SIR.—Those persons who have decided on disbelieving that England is a gold-bearing country, will do well to re-consider the matter, or they run a fair chance of being left behind in the race, which cannot now be long deferred. A few facts have recently been established, which will open the eyes of the most incredulous, and produce an effect amongst mining speculators which has not been witnessed in our time. Recent researches have established the fact of gold occurring in this country in other forms than the native. Now, I propose to show that this fact at once accounts for all the strange circumstances connected with previous gold experiments, and that with far more probability than the notion of fraud so generally entertained, an idea which I have no hesitation in saying cannot be sustained by argument.

If we were to subject a small portion of the ore of gold to the action of Berdan's or Perkes' machine, for they are essentially the same, we should probably obtain in the gold it might contain, but we should do more. The action of the iron balls or rollers on the iron bases or beds would generate a strong electrical current; this would decompose the sulphurites, and precipitate the gold contained, which would immediately be taken up and held in solution by the mercury in the machine. Now, this is what actually did occur in the small samples; but try to produce the same effect with a large quantity of mineral in the machine, and failure would ensue, exactly as it did both with Berdan's and Perkes'.

There would be far less electrical action, and a much larger quantity of mineral to be acted on. When a ball or roller revolves in a basin, or on a flat surface, there being a rubbing movement besides, as there was in both the engines under consideration, a small quantity of grit will not separate the surfaces. This is illustrated by grinding lump sugar with a bottle; but a large quantity of stuff will completely separate them; hence, in the latter case, there will be little or no electrical action; in the former, a great deal. We perceive from this that these machines are well adapted to act on gold ores in very minute quantities, but are useless for large, while they will not act with more or less success on native gold.

Now, this, I submit, is an explanation of the failures of these celebrated machines, more probable than fraud; for, admitting fraud to be possible—nay, probable—still the effect I have pointed out is the natural result of known chemical laws, and cannot

in some works in North Wales 6 tons only. This gentleman did not explain the different character of the ores, the former being the sulphuret of zinc, the latter the carbonate, the only really profitable ore, and the one on which confidence can be placed to the results.

My object in calling attention to these matters is, that the proceedings of the Society of Arts may be rendered of that public utility for which, from its large number of members, of great influence and scientific attainments, it is so eminently adapted. Every should be if any remarks of mine should tend to depreciate its great value in the public mind; but, with every capability of producing great general good, I am anxious to see its proceedings unalloyed by precipitancy or expediency.

Worthington, April 22.

Sir George Grey will see to it, that all the candidates who apply for appointments shall be heard by a tribunal he may appoint, and I will not for one moment believe that such tribunal will be swayed into a wrong decision by any party, but that such examiners will give the appointments only to those candidates whose practical qualifications entitle them to respect and favour.

The present class of inspectors, at least some of them, are highly educated men, skilled in several sciences; all such attainments are always entitled to respect and consideration, but the science above all others which should be made and insisted upon by the examiners as a *sine qua non* in all future inspectors' appointments is the science of practice, always hardly attained by years of continuous battle and suffering, with far worse than a Russian see, and that, too, in a region much more ruinous and disastrous than the Crimea has been to the gallant English, French, and Turkish heroes.

T. STEPHENSON.

HIGH-PRESSURE ENGINES FOR MINES.

SIR.—I read with interest the summary given in your Journal of the 24th March last, of two lectures delivered by Mr. William Fairbairn. I think that the views he advanced—viz., the extended application of high-pressure engines working expansively, and an employment of steam of increased pressure—cannot fail to approve themselves to all who have considered the employment of steam as a theoretical question; and in this instance, as in all others, a principle which is theoretically right cannot fail of practical success, if judiciously carried into operation.

It occurred to me that high-pressure engines might be made extensively useful in mining, and I would premise that my remarks are based—First, upon the fact to which Mr. Fairbairn drew attention, that high-pressure engines work expansively, with steam of high elasticity, may be made to approach very near to condensing engines in point of economy; and, in the second place, upon the fact that some of the most eminent engineers of the present day advocate the employment of several engines of small size, connected directly with the work to be done, in place of one large engine whose power has to be transmitted to the various points where it is wanted in the first instance, instead of distributing the power generated by its application; they would transmit the steam by pipes, instead of conveying the power by shafting, bands, or trains of wheels.

I propose to make a few remarks as to the relative advantages of condensing and non-condensing engines, and afterwards to point out the cases in which I conceive the latter might with advantage be substituted for the former in mining operations. The advantages gained by employing the high-pressure engines are as follows:

1. The first is very much less.

2. The loss of power in working the air-pump, and the friction of the machinery required in connection with the condensation of the steam, are done away with.

3. Such an engine can ordinarily be connected much more directly with its work than a condensing beam engine.

4. The power of such an engine, if strongly and compactly built, may be increased to a greater extent than it is practicable to do with the condensing engine, by increasing either the speed of the engine or the pressure of the steam used.

The military advantage of the condensing engine to be set against these is, that an addition of power is gained by the removal of the atmospheric resistance to the piston; the force thus gained is equivalent to that which would be gained by increasing the pressure of the steam to the extent of 16 lbs, or 15 lbs, to the square inch; some deduction must, however, be made from this for the expenditure of force required for working the air-pump.

Now, it will be very readily seen that the proportional gain is less when high pressures are used than when low ones are used. Where the average pressure of the steam throughout the stroke is 30 lbs, the amount of power gained by condensing the steam will be about half the power exercised by the steam without condensation; but if the average pressure of the steam be 45 lbs per square inch, the proportion of gain will be reduced to one-third; if the pressure be raised to 60 lbs., it will be further reduced to one-fourth, and so on. The disadvantage of the non-condensing engine point of economy diminishes rapidly with the employment of higher pressures. Having shown that the loss consequent upon not condensing the steam may be reduced to a small fraction of the power exerted, and that the advantages gained by not condensing are, on the other hand, very considerable, let us ask, whether high-pressure engines can be advantageously employed for mining purposes.

It appears to me that they may be. In most mines a perpendicular shaft is sunk and cross-sets are made to the various lodes, but in many cases it is necessary, as in East Wheal Rose, to sink shafts on the course of the lode, or to work pumps at various points by flat-rods, or other mechanical contrivances for transmitting a portion of the engine power. In all such cases I would propose to substitute for one engine several small high-pressure engines, placed at any points where power was wanted; such engines would be placed in recesses in the shafts, and would be fly-wheel engines, working at a high speed, with gearing for driving one or more lifts of pumps at such speed as might be convenient. A 2½ inch pipe is ample for supplying high-pressure steam to an engine of 100 or more horse-power, and a comparatively small steam main, properly protected from cooling by radiation, would convey steam for working several such engines, from boilers placed, as at present, on the surface.

By the adoption of such a plan a great quantity of cross-cutting, and other very costly work, might in many mines be saved. I may mention another very important advantage which would attend its adoption: If increased power was required on account of an increased volume of water to be raised, or of increased depth, it could be obtained without the necessity, which now often occurs, of taking up a large pumping-engine, and putting down one of greater power. On the proposed plan, an increase in the speed of the engines (which with high-pressure engines is no disadvantage) would enable the machinery to contend successfully with an increased volume of water, and an addition of one or more similar engines at a greater depth than those already worked would be all that would be wanted to enable the mine to be worked to any required depth.

I fully acknowledge that, under ordinary circumstances, when many lodes are worked from one shaft, and a perpendicular shaft can be adopted without disadvantage, the Cornish pumping-engine is a machine of surpassing elegance and economy; but I submit the plan which has occurred to me for the consideration of mine engineers, as adapted to mines where it is necessary to depart from the ordinary mode of working, and with the conviction that, whether such a plan be a good one or not, advantage cannot but result from the consideration and discussion of the question.—Birmingham, April 12.

W. R. WILLS.

INSPECTION OF COAL MINES.

TO SIR GEORGE GREY, COLLIERY OWNERS, COAL MINERS, BOARD OF EXAMINERS, AND ALL WHOM IT MAY CONCERN.

SIR.—In your valuable Journal of the 7th inst. I read a letter, signed "C. E.," referring upon your judgment for allowing certain letters to appear in your Journal. What a pity that any one should wish to stifle enquiry, especially on a subject so deeply important to the nation, but more particularly to the industrial classes of this country.

The letter to which I allude animadverts, I think, very unjustly on the letters of "Coal Miner," which have appeared from time to time in your liberal Journal, and which must have been read by your numerous readers, who are practically acquainted with mines, with considerable interest. Your correspondent speaks of "Coal Miner" being held up by Mr. Mackworth's incompetency as an inspector of mines. A similar charge was made against "Coal Miner," by a Mr. Richardson, in your Journal of the 10th of 1855, and which was replied to by "Coal Miner" in the Journal of the 24th of February. In the face of that reply, in which "Coal Miner" denies this unjust accusation (as regards Mr. Mackworth's incompetency), and which your correspondent, "C. E.," cannot have read, I think your correspondent's letter is all a silly, and totally out of place. Who your valuable correspondent, "Coal Miner," is I do not know, but I think it only due to your judgment in giving insertion to his letters, and him, to say that I have read with singular attention and interest all the letters on the subject he has written, a subject, I confess, but very little understood by non-practical men. I frankly confess, however, that my opinion and conclusions, which I think are legitimately drawn, from "Coal Miner's" letters, are entirely at variance with those of Mr. Richardson and "C. E.," as to Mr. Mackworth's incompetency. What I understand from "Coal Miner's" observations is that "Coal Miner" does not question the educational and engineering abilities of Mr. Mackworth—they are high, if you please, superlatively high; but he believes, that he is to be a thoroughly efficient inspector of coal mines, ought himself to be, or have been, a practical miner, who has seen with his own eyes, and, fat, upon his own various spirit, the doings of this fall destroyer, in its destructive operations in various forms, in the coal mines of this country. Upon re-consideration, I think your correspondent, "C. E.," must admit that "Coal Miner," who appears to have spent his life in mines, must really know, practically, much more than he or any of his class, who may have had considerable knowledge or experience in surveying mines, &c., but who positively cannot know, from want of practical knowledge, such as "Coal Miner," the real dangers of mines and mining.

Mr. Mackworth's abilities I admire and appreciate as warmly as any of your numerous correspondents, and I hesitate not to say, few, if any, have read with greater pleasure than myself. Mr. Mackworth's lecture delivered at the Royal Institution, of 1852, &c., &c. But I will not believe Mr. Mackworth will pretend that, because of his great engineering abilities, he is, therefore, to the exclusion of all other classes, the best qualified, and, consequently, the most efficient inspector of mines. I know that some of the most serious blunders have been made by eminent engineers, in directing mining and other operations, to the positive ruin of their employers; and, as regards the ventilation of coal mines, so as to prevent accidents—the principal being in mines—look at it in whatever way you please, whether as regards the health and safety of the miner, or the remunerative profits of his employer, all published evidence hitherto made known on that subject, only goes to prove that this greatest evil in mining operations has been little, very little, understood by the most eminent engineers.

The great fact is this, which cannot be pressed with too much earnestness upon her Majesty's Government, colliery inspectors, owners, agents, miners, and the thinking public of this country, that it is an undeniable fact that there are places in most mines fraught with danger and death; that those places are studiously concealed from the inspector; that there are sensible colliers in all mines who know this, and who, if they feared not the consequences, could reveal the horrors of this death pot, which is not to be found for any Government Inspector by colliery agents during an inspection.

I see by my private memoranda that on the 5th of Nov., 1855, I had the pleasure to have rather a long and very interesting conversation with him, in his room in the Museum of Practical Geology, Jermyn-street, London, on the subject of mining and their inspection, &c., and he very kindly remarked to me, just when leaving him, and after thanking me very much for the interview, "Daylight was appearing in this matter." I may hereafter see it expedient to give an outline from my memorandum to your numerous readers of this ever to be remembered interview with Mr. Henry De Bieche, who knew, to my great surprise, a great deal of mining and the like.

Considerable anxiety seems to exist, both amongst colliery owners and the coal miners and their friends, as to the qualification and examination of the new inspectors.

It is to be about to be appointed, and more particularly in reference to the party that is to be entrusted by Government to examine candidates as to their qualification for an independent appointment. "I can see no reason to justify this solicitude." No doubt

in some works in North Wales 6 tons only. This gentleman did not explain the different character of the ores, the former being the sulphuret of zinc, the latter the carbonate, the only really profitable ore, and the one on which confidence can be placed to the results.

My object in calling attention to these matters is, that the proceedings of the Society of Arts may be rendered of that public utility for which, from its large number of members, of great influence and scientific attainments, it is so eminently adapted. Every should be if any remarks of mine should tend to depreciate its great value in the public mind; but, with every capability of producing great general good, I am anxious to see its proceedings unalloyed by precipitancy or expediency.

M. S. A.

on from the first to the second, or even a third. One lode often absorbs nearly all the ore in a district, whether it is lead or copper.

N. ENNOR.

Wiveliscombe, April 14.

ALFRED CONSOLS, AND CALSTOCK UNITED MINES.

SIR.—I examined ALFRED CONSOLS about Christmas last; I then remarked to Capt. White and Treleas that a horse of killa was making its appearance in the rich veins, that would cause a split in the lode, which has turned out to be correct: this lode did so in levels above, and produced the more ore for it. It is these things that make the lode as they fall in again in depth. It is not a long bunch of ore, neither is it running in the most favourable direction, but it has many intersections, and has proved a splendid bunch of ore. If there has been nothing recently discovered showing more unfavourable indications than the split, the shareholders need not be alarmed.

CALSTOCK UNITED shareholders will excuse my remarks, as I give them with a view of setting them right. I assisted to make nearly all the ancient workings in that mine. The engine-shaft now sinking was commenced by Capt. Hitchens, and intended to cut the lode at the junction now named. He had it sunk to about 4 fms. below the deep adit, where he put a man to open on the south lode, to ascertain its character and size. The pit was opened, and filled in again the same day, but few saw it open. The shaft was stopped at the end of the month until the adit was home, long before which Capt. Hitchens had ceased to be the company's agent: he was succeeded by Capt. Brunton. I assisted to drive the adit home to the shaft, after which we drove south towards the south lode, and after driving what was then thought to be all the ground up to the back of the lode (I think about 14 fms.), Capt. Brunton became timid, and had the pit opened, when it turned out that the lode was underlyng south, which so annoyed him, that he discharged all the men, and stopped the mine. These two blunders could have been prevented by an outlay of £1. This might not have been the main lode; it may be still further south. I think Capt. Malachy and Lucas have done something on this lode since in search of silver, which may have thrown some light on it. I am not aware whether they extended the cross-cut, as I was not in the district.

The present party, for their spirited outlay, are deserving of success, and would do well to look into it at once. If this lode is where they state it is, and will form a junction below the engine-shaft, it is also opposite Monk's shaft, and will form a junction at the same depth there, below where the hot water rises, which is by far the most likely place to find copper. Capt. Cook should have remarked on the temperature of this water at the present time. The captains had better go back through the deep adit, to see if they can find a lode dipping north; I do not recollect ever seeing one worthy of notice.—Wiveliscombe, April 17.

N. ENNOR.

GREAT COWARCH MINE.

SIR.—As the correspondence with Mr. Low, on the subject of his assays for gold from the quartz of this mine, has been conducted exclusively by myself, and as I have given my word of honour that the result of such assays should be communicated only to the adventurers in the first instance, I have to request that, in your next Journal, you will make known that it was not by my authority you announced, last week, that Mr. Low had assayed results equal to 6 ozs. of gold per ton. And when I tell you further, that at the time your informant, whoever he may be, was vouchsafed his truthful intelligence, Mr. Low had not, in fact, completed his assays—that, until this morning, I was not in possession of the results—and that, at this moment, they are unknown to any one in the world but myself and Mr. Low, you will be able properly to estimate the worth of some of the information which reaches you.

I shall certainly ask your attendance at the meeting of adventurers, which will shortly be called, to hear the results of 60 assays made from samplings of 10 quarts, of 5 tons each; until which time it will save your valuable space if you disregard all information on the subject.

18, Chatham-place, Blackfriars, April 18.

THE DREWSTEIGNTON MINE.

SIR.—In answer to the enquiries of your correspondent, Mr. G. Gresham, in your Journal of the 14th inst., I beg to inform him and other shareholders, that the operations of the company are still continued in driving the adit levels through the limestone, and they expect in a very short time to reach the first lead lode, which there is every prospect will prove a very rich one. The committee have also determined to erect two kilns at the mouth of the adit, so as to manufacture the limestone as fast as excavated, and by such an advantageous application of the material they will not only be enabled to supply the urgent demand of the surrounding agriculturists, but, at the same time, from this source alone they hope to secure a good dividend to the shareholders. The committee are at present watching with considerable anxiety the progress and result of an important experiment, going on under the superintendence of Dr. Collyer, with 30 tons of the gossan from their mine, with the view to test the several former analyses made by various practical operators with small quantities of the ore; the result of which in every case showed a proportion of $\frac{1}{2}$ oz. to 2 ozs. of pure gold to the ton of gossan; and as soon as the above experiment has been concluded, the committee will convene a meeting of the shareholders, to lay before them a full report of the position of the company, with their suggestions as to the best mode of promoting its future interest. To prove the many resources of the mine, I may add that a sample of the mundic taken from it was lately analysed by Professor Mitchell, and found to contain 45 parts in every 100 of pure sulphur.

April 17.

JAMES PHILIP, Managing Director.

WELSH POTOSI LEAD AND COPPER MINING COMPANY.

SIR.—I recently enquired, through your Journal, the date, price, and the purveyor of the "100 tons of lead" alleged to have been sampled by this mine in Jan. last, as no sale of it has appeared in the *Mining Journal*.

The manager (Mr. Wilkinson) replied to the enquiry, by informing the shareholders the amount realised for the said 100 tons; but I particularly noticed that he omitted to give the "date" when such sale took place. A sale of 100 tons was duly recorded in the proper column of the Journal prior to the meeting in January last, but none since.

It would be very satisfactory to the shareholders, therefore, if Mr. Wilkinson would supply the "date" of sale of the said 100 tons of lead, reported as being sampled at the last meeting, because I notice in the last number of the Journal, in the column giving the "return of lead ore sold by all the mines during the last quarter," that no mention is made of any sale by the "Welsh Potosi" Mining Company, which, to say the least of it, is passing strange; but in another column of the same paper, under the head of "Lead ore shipped at Abergavenny in the month of March," mention is made of the "Welsh Potosi" Mining Company having shipped "five tons and a quarter" of gossan only, instead of 100 tons—requires explanation.

A. WELSHMAN.

City, April 20.

WHEAL VIRTUE MINING COMPANY.

SIR.—I have been for some time expecting to see in your valuable Journal some reports, or statements, of Wheal Virtue: hitherto I have been disappointed; but I am now thoroughly acquainted with the mine and its locality, and holding a large interest as an adventurer in the property, I beg to hand you a report of the recent proceedings and prospects of the concern.—Stithians, April 14.

AN OLD MINER.

WHEAL VIRTUE is situated in the parish of Perranarworthal, Cornwall, one of the best mineral districts in the county. The sett is very extensive, and has many lodes running through it: some of them, which are of a very high character, are now open to the surface, and when last wrought yielded great quantities of tin—copper at that period was not known in this country. The south, called Wheal Manduinn Great lode, varies from 3 to 12 feet wide, and is composed chiefly of prian, gossan, and soft yellow quartz, having tin disseminated throughout. Judging from the magnitude of the excavations, and the total absence of all the debris from the former operations, the conviction that vast quantities of tin have been found here is irresistible. The north part of the same lode presents a splendid gossan for producing copper.

About 30 fms. north of Wheal Manduinn Great lode is another, called the Bounty Lode. This varies from 3 to 6 feet wide, in which the gossan is plentiful, and as fine as can be seen in the county. Near the surface it has been wrought for a great length by the ancient miners, and all the stuff excavated has been stamped and dressed for tin. North of the Bounty lode there is another at a distance of only 6 fathoms; the width of this varies from 3 to 4 feet, and its composition and structure are most promising for both tin and copper. There are great many lodes still further north in this sett, and on one of them large quantities of copper have been raised. In the railway tunnel, only a few months since, a rich silver-lead lode was found, about 8 fathoms below the surface, since which an adit has been driven by the present adventurers, and intersected it 10 feet deeper than the bottom of the tunnel. This lode varies from 2 to 3 feet wide, the whole length open; it is about 30 fathoms, and a more kindly lode, at so little depth, could not be seen; it is composed of prian, gossan, soft sandy quartz, mundic, and good regular veins of rich silver-lead, from 4 to 6 in. wide, for a great many fathoms in length, and it is principally in the bottom of the lode, against the floor, on the north part of the lode; the character of the lode throughout the level clearly indicates that it is not deep enough for substantial deposits of ore. Two shafts have been sunk from the surface, and are communicated to the adit level; the east shaft will intersect the lode about 20 fathoms below the adit, and the west shaft will take the lode in sinking 10 feet more, where it is expected it will be found rich, after which, the shaft will be driven on the course of the lode; the underlie is about 2 feet in a fathom. The water is very little, and can be drained to a good depth with a horse engine, to give this lode a fair trial, to prove if it will be worth more powerful machinery. There has been a small parcel, about 2 tons, of lead ore sold about a fortnight since, as a sample, to ascertain its value, the price was £12. 2s. 6d. per ton; the price of lead ore, particularly in this county and Devon, has greatly gone down of late.

The sett has not only eleven courses running through it, but it adjoins the great granite range, is traversed by all the cross-courses running through the United Mines, the lodes of which are parallel to those in Wheal Virtue, and the containing rock and matrix of the formations are identical in character in both mines. The local advantages attached to this mine are of no ordinary kind. A deep adit, of only a

Meetings of Mining Companies.

NORTH BRITISH AUSTRALASIAN COMPANY.

The adjourned annual general meeting of proprietors was held at the London Tavern, Bishopsgate, on Tuesday.—Mr. WILLIAM LOFTUS LOWNDES in the chair.

Mr. BUNGE (the secretary) having read the notice convening the meeting.

The CHAIRMAN said, as the report had been printed and circulated, it would save the necessity for reading it. [An abstract of the report and accounts appeared in our Journal of the 14th inst.] The first business he had to propose was, that the report and accounts be approved of and adopted. He sincerely hoped these documents were full enough to induce them to adopt them. The effect of circulating the report previous to the meeting had been very satisfactory, as they had received the opinions of some of the shareholders, and upon those communications he would address them. It had been suggested that the proposed mode of paying the dividend would not be satisfactory; but it did not appear to be understood how the difficulty arose; and a suggestion had been made by some respectable shareholders in Scotland that the directors should borrow the money to pay the dividends, but they had not the power under the deed to borrow. If the produce was in this country there might be no difficulty in obtaining advances from the bankers, but he believed some of the bills of lading would not arrive until August next, consequently it was impossible to pay the dividend earlier than the time stated in the report. If they had more floating capital they could afford to pay the dividend at once. It was not that they had not got the money, but it was floating about.

Mr. ELLIS wished to know the amount required to pay the dividend?

The CHAIRMAN replied 55,000.

Mr. ELLIS: Is there not sufficient in the bankers' hands to pay the first instalment at once?—Mr. JOHN TAYLOR, jun., explained that there was not sufficient at the present time; by reference to the accounts it would be found that they were made up to the 30th of December last.

The CHAIRMAN said that it would be seen, on reference to the report, that the committee had received an abstract of the titles to the various freehold properties of the company; and Mr. Mackay explains, in regard to the leasehold properties, that by an order of the Colonial Government, under date 28th of October, 1851, these are now held under lease for 14 years, from the 1st Jan. 1852. Generally, the leases for old runs have not been issued, nor will be until the runs are surveyed. Although, by the accounts received, the power of purchase was not well defined, he (the chairman) did not anticipate any difficulty in obtaining a renewal of the leases upon the terms they now held the property. He would briefly call attention to the accounts, to show that they did not intend to pay the dividend out of the capital; indeed, they had no capital, but they would find the stock of sheep which, in 1852, were 23,448 head, had increased in 1854 to 29,880; and if they went through that page of the accounts they would find in every instance an increase, clearly proving that the profit was honestly made out of which it was proposed to pay the dividend. (Cheers.)

Mr. SPENCE seconded the resolution adopting the report and accounts, which was carried unanimously.

Mr. BROMFIELD wished for some information respecting the Kawan Mine, and the quantity of ore in sight. It might be worth a million, or more. He believed they had already spent 46,000£ upon it; and as Mr. Taylor was a great authority in mining, he should be happy to hear that gentleman answer the question.

Mr. J. TAYLOR, jun., said, when the management of the company's affairs was transferred from Aberdeen to London, it was found that the mine had been discovered some years, and a large sum of money had been expended. The mine had returned 45,000£ worth of copper ore, but the first cargo was ore pyrites, not rich in quality, and caused great danger in shipment from spontaneous combustion; but a rich branch of ore had been discovered, which, according to Mr. Beeger's printed statement, could be worked at a profit, and a large sum of money had been expended in calcining works for bringing it into regulus; and the impression of his brother and himself was, that the capital had been expended judiciously. The total amount laid out since they had undertaken the management was about 17,000£; and there was one thing quite certain—they had got a mine, and were not seeking for one. He had sent out such men and machinery as were thought proper, to sink for another level.

A SHAREHOLDER complained that there appeared some delay in sending the produce to this country.

The CHAIRMAN assured the proprietor that it was sent over from the colony as speedily as possible.

Mr. TAYLOR said—one of the estates were 300 miles from Moreton Bay, consequently it took a long time to bring the produce down to the port?

A SHAREHOLDER wished to know whether there was sufficient floating capital to carry on the business hereafter?—The CHAIRMAN replied he thought not.

Mr. J. TAYLOR, jun., said the wool sold very well at the ordinary markets, and although they had offered from France to take the stock, it was not considered advisable to depart from the usual plan. It was apparent, for some time past, that they would require more floating capital, and the account now produced proved it. In addition to the ordinary operations of the company, Mr. Mackay had established a profitable business, by making advances to parties in the colony, and sending the produce here for sale, by which the company's expenses were reduced, both at home and abroad, without running the slightest risk. A shareholder had observed that it was perfectly manifest that they would require more floating capital; it would, therefore, be suggested that the number of shares should be increased to 200,000, which would be sufficient, as they did not intend to buy any more land, but when a favourable opportunity arose might sell some of the distant runs. The number of new shares would be 11,324, to be issued at par.

Mr. RUDING enquired whether the 4000£ worth of copper ore had ever been sold? Mr. TAYLOR said it had been accounted for, and carried to the credit of the mine, the loss being diminished by that amount.

Mr. RUDING: Can we expect early return from the mines?

Mr. TAYLOR: They have commenced active operations; the fires were to be lighted in January last, and the ore would be turned into regulus.

A SHAREHOLDER observed that, as it required only 55,000£ to pay the dividend, there would be about 50,000£ to go on with, so that, in fact, the real profit on the 12 months' operations had been 7 per cent.

Mr. TAYLOR: And if we had more money, we could carry it to a still greater profit.

Mr. GEORGE suggested that, instead of increasing the capital, they should forego one year's dividends, which would give at once the additional amount required.

Mr. TAYLOR said foregoing the dividend would not be popular, because, amongst those who had invested their money were widows and others, who looked with confidence for a dividend.

Mr. WALKER said the board had the power to issue those shares, but they preferred the proposition coming from the proprietors. It was most undesirable that the concern should be carried on with a limited capital; and the directors were promoting the interest of the company by issuing the shares not under par. He (Mr. Walker) would conclude by moving the following resolution:—"That, in consequence of the long period that elapses between the making up of the annual accounts and the realisation of the yearly produce, it is expedient to provide an amount of floating capital, by means of which the payment of dividends at regular stated periods may be secured. That such floating capital shall be raised by the issue of 11,324 shares, of 1s. each, to be issued not below par, in such manner as the committee shall deem best for the interest of the company."

Mr. BROMFIELD seconded the resolution, which was carried unanimously.

A SHAREHOLDER said it was unfair that the directors should work for nothing; he should, therefore, move that the sum of 500£ be paid them for their past services.

Mr. HADLOW said, a proposition was made at the last annual meeting to pay them, but the board would not accept any remuneration until a profit was realised. A lengthened discussion ensued, which terminated in a resolution being unanimously passed, awarding the directors 400£ a year for their services from 1st January, 1854.

Messrs. John Addis, George Bowness Carr, George Hay Donaldson, Patrick Douglas Hadlow, William Loftus Lowndes, and Lieut.-Colonel Oliphant, were re-elected the committee of management.

The CHAIRMAN said, the ordinary business of the meeting being concluded, it was intended to have made it special, for the purpose of submitting a series of resolutions for making certain alterations in the contract of co-partnership of the company, but it had been suggested to defer those proceedings for the present, as the Government were now engaged introducing a measure to Parliament for the protection and better regulation of joint-stock and other companies. They would, therefore, hold back, as the new law might fully answer every purpose. The proceedings terminated with a vote of thanks to the chairman.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.

The adjourned special meeting of shareholders was held at the London Tavern, on Monday, Mr. G. E. CORNELL in the chair.

After the SECRETARY had read the minutes of the last meeting, which were confirmed and adopted,

The CHAIRMAN observed he had again to regret that the advices, which had been so long looked for from the scene of the operations of the company, and in expectation of which the meeting had been twice adjourned, had not yet come to hand; and he had still further to regret that the call of a contribution of 1s. per share, resolved upon at the last meeting, had not been responded to in the manner in which he had hoped it would, and in which it certainly ought to have been, had the shareholders generally consulted their own interests. Although it was stated at the last meeting that, unless a sum of at least 30,000£ were forthcoming at this time, to discharge the debt to which the property in California was liable, the property would probably be lost to the company. Shareholders had subscribed only between 11,000£ and 12,000£, and even the further funds promised would not bring up the amount to more than one-third of the sum which the shareholders ought to have subscribed by payment of 1s. per share. The directors had, however, contemplated the continuation of the subscription falling short of the amount required, and had, upon their own responsibility, taken steps for raising the sum of 40,000£; and although the transaction was not yet completed, he thought he might promise the shareholders that sufficient funds to free the property from the debt would be remitted in the course of a week or ten days. Although this step would free the company from the pressing and imminent danger which at the last meeting threatened the very existence of the company, still he begged to remind the shareholders that the unpaid contributions of 1s. per share were as much needed as ever. The amount raised must be paid, and the only means they had of obtaining funds was to take such steps as would enable the crushing to be carried on continuously during the dry season. To effect this water must be obtained artificially, at a considerable outlay; to meet this outlay a considerable sum, without delay, to be remitted to California. Possibly the produce of the present winter might put their agents in a position to procure water artificially, but it would be very short-sighted policy to leave such a result to the accidental support of the elements. Nature might provide them with a sufficient supply for two months, or possibly more, but after that they must resort to artificial means. Upon the subject of the future prospects of the company, he would state what shareholders were probably well aware of—viz., that by the latest advices the long-looked-for winter rains had set in. They, however, had not received letters of late sufficiently late to show the effect upon the company's works. Their last advices were of the 13th Feb., a period anterior to the setting in of the wet season; still something had been done. He then read the last despatch from Sir H. Huntley, by which it appeared that he had been enabled to resume crushing upon a limited scale during the 9th, 10th, 11th, and 12th of February, during each of which days the work had been operated for about seven hours in each day, and had reduced upwards of 30 tons of ore. When the advices were despatched the amalgam from these 30 tons had not been restored, but the agent inferred from appearances that the result would equal that obtained from the former crushing; and if that criterion could be relied upon, it would give a gross return of about 180£, at a cost of about 60£, or a clear profit of at least 120£. In the four days. He said that this must not be considered as a fair criterion of what might be done, as the expense on the days when they had only reduced 5 or 6 tons was as great as on those when they had reduced 10 tons, so that the fair inference was that, when the state of the water enabled them to reduce 30 tons (which a more

abundant supply of water would render easy), such amount would be reduced at a cost not exceeding that incurred in the reduction of 10 tons. This state of things was further encouraging, as it showed that they could only procure water sufficient for crushing during six or seven hours a day, even that operation would produce a good profit. Such a result, at any rate, could be ensured if the whole of the shareholders subscribed their 1s. per share, and he, therefore, sincerely hoped that now the property of the company was safe from immediate danger, that all such of the proprietors as had not subscribed their quota to the fund would come forward and do so without delay. It was to the interest of every individual to do so. Nearly all the small holders had come forward, and the larger ones, who had in reality a greater interest in the welfare of the company, had held back. This was not unnatural, for they might have thought, after subscribing their quota, the property might still stand unredeemed. This risk being now passed, he trusted the shareholders who had not yet subscribed would no longer hesitate to supply those funds upon which the future success of the company so much depended. He thought the bonus of 25 per cent., which, in fact, made the shares upon which that sum was paid preference shares, but in a most non-injurious form, ought to be an inducement to many to come forward and pay up. The directors had sent out a good man to manage the works, which was an additional guarantee for the future success of the undertaking.

Mr. WILLIAMSON said he felt that the directors were worthy of the support of their constituency; they had shown themselves most energetic in protecting the interests of the company. It was of great importance they should have obtained the subscription of 1s. per share, and he felt great surprise that only about 11,000£ had been supplied. The shareholders had shown great apathy with regard to their own interests: there was no doubt they possessed a good property. It would be clearly seen that if they were to have a continuous supply of water they must depend on themselves, not on the capriciousness of the elements. He, therefore, moved that the best thanks of the shareholders should be given to the directors, for the energy they had shown in their management of the affairs of the company, more especially for the steps they had taken in raising the 4000£ for the redemption of the company's property.

Mr. GEAR said that he felt great pleasure in seconding this resolution, convinced as he was that, had it not been for the energetic conduct of the directors, the property would have been lost to them, without any hopes of redemption.

A PROPRIETOR enquired what means of communication the directors had with the shareholders, in case they received any information?

The CHAIRMAN replied that they did not feel justified in constantly reporting delays and accidents, but whenever they had any information of importance to the proprietors they invariably communicated it to the shareholders through the medium of the *Mining Journal*.—The resolution was then put, and carried unanimously.

Mr. COMBE enquired if it would be better, instead of holding their meetings at the Freemasons' Tavern, that these should take place at the offices?

The CHAIRMAN stated the offices were most inconvenient; the expense of holding them at the Freemasons' Tavern was small, and if a large number of shareholders assembled at the offices, the consequence would be that they would be obliged to adjourn, and seek for a room in some tavern in the neighbourhood.

Mr. MASSEY DAWSON observed that the shareholders must be aware the cause why no returns had been made was the deficiency of the supply of water. This had not only paralysed the banking, but likewise the agricultural, commercial, and mining industry of California; in fact, there had been a water famine there. No one could arraign the decesses of Providence, and from all received accounts other companies were in the same position as themselves. The rainy season had now set in, and he was in hopes they would shortly hear from Sir Henry Huntley. For this purpose, he would hope that the meeting should be further adjourned until Friday, the 18th of May, by which time he confidently anticipated they would be in receipt of satisfactory advices.

Mr. WILSON observed that he thought a discretionary power should be afforded to the directors in rejecting, if they pleased, the contribution of 1s. per share from the lagging shareholders. There were many who now held back; if they received favourable news, and were of opinion that their contributions would be returned to them, with a bonus of 25 per cent., would subscribe. Such he thought should be excluded from the benefits offered by the directors. In the meantime, he had great pleasure in seconding Mr. Massey Dawson's resolution for an adjournment until the 18th May.

A discussion then ensued, when it was resolved that a discretionary power should be vested in the directors to reject the contribution of 1s. per share, if they found such to be necessary.

Mr. MASSEY DAWSON observed, they could not separate without giving a cordial vote of thanks to the chairman. Every one could bear testimony to the energetic way in which he had worked, and the unremitting and unwearied attention he had paid to the affairs of the company. He was constantly at his post, and he believed there was no man in the City of London, who devoted so much time to the interests of any company he was connected with, as did their worthy chairman.

The resolution was put, and carried by acclamation.

The CHAIRMAN, in returning thanks, said he had great confidence in the property, and if they had sufficient capital he had no doubt operations would be brought to a successful issue. If they had 25,000£, they could realise 200,000£ annually. He was not going to ask them to subscribe that: it was his opinion, and in this he was borne out by all who had experience in California. He thanked them for the confidence they displayed in him, which he trusted he should always merit.

A desultory conversation then ensued, and the meeting was adjourned to May 18.

WHEAL UNY TIN AND COPPER MINING COMPANY.

The quarterly general meeting of proprietors was held on Tuesday, at the offices, 69, Lombard-street, Mr. P. L. HUMPS in the chair.

Mr. HURR (the secretary) read the notice convening the meeting, and the minutes of the last one, which were confirmed. Capt. ROWE, the managing agent at the mine, attended, and read the following report:—

April 12.—The 60 fm. level is driven east of the engine-shaft 9 fms.; it is driving by six men, at 102 fm. per min. We are driving on the flookan part of the lode, as it is easier for driving. We intend to drive 5 or 6 fms. further east, and then cut south, to see the main part. We have commenced driving the 60, west of the engine-shaft, with two men; price for driving 62, 10s. Our object here is to get west under a shoot of tin gone down in the bottom of the 40, about 25 fms. west of the present end: another object here is to rise against Cock's shaft, and bring down the kibble. In driving this end we hope to open tribute ground; the end is worth 4f. per fathom for tin. The north part of the lode is standing: what it is worth we are unable to say. The 50, east of the engine-shaft, is driving to within 5 fathoms of Gooding's bottoms. We have opened on the lode for 6 fms. in length, and find it to be 6-fet wide, and worth on the average 14f. per fathom. The end is driving 9 fms. high by six men, at 102 fm. per fathom. As we approach the bottoms we expect the end will improve. We have three men driving west on this lode; they are opening tribute ground. Some time since we commenced driving a cross-cut 2 fms. west of the engine-shaft, in the 40. We have driven through the lode 3 fathoms, and find some good stones of copper and tin, worth 4 cwt. per 100 sacks; we have not found anything here as yet that will work on tribute: we have still another part of the lode to cut through, which we intend to do before suspending operations. We have likewise commenced driving the 40, west of Cock's shaft, on the south part of the lode; this is opening tribute ground that will work at 1s. or 1s. in 12; I have put two men to stop the back of this level, to break itself for our stamps. We find the best part of the lode in the bottom of the level, about 10 fms. east of Gooding's shaft. We have four men stopping the back of the 23; the lode is 4 fms. wide, and worth 12f. per fathom; price for stopping 10s. From what we have done at this place, we believe this will prove to be a good piece of ground—ground that will work at 10s. in 12. This is all we are doing in tribute work on the tin lode. There is not much change, on the whole, in our tribute department during the last three months; the average tribute is 10s. 6d. Our copper tribute is not looking so well at present; we have two pitches working on copper, at 7s. and 8s. in 12. Some of the tin tributaries are breaking a little copper too. This department will be variable, in consequence of our not having any copper ground laid open on the main lode. Our operations on the copper are confined to the new shaft, driving the 12 cross-cut and the 30 west towards the new shaft. The new shaft is down 14 fms. under the adit. We have sunk in three months 11 fathoms, and cased and closed down the shaft: about 12 fms. under the adit we meet with the granite; 5 feet before we reached the granite we fell in with a branch, underlying south 3 fms. in a fathom; it is from 4 to 6 in. wide, and contains some good stones of copper ore: it is rather uncertain if this is the copper lode or not. We have 2 fms. further to sink in order to reach the 12; when this is done we shall endeavour to find the lode, and sink on it. The 12 cross-cut, which is 20 fms. west of the new shaft, is in to where we expected to see the lode. We have a change in the granite the last 6 ft., showing indications of our approaching a lode. The 30 is 5 fms. short of the new shaft; the lode is 1 ft. wide, and contains mica and pebbles, but poor for copper. We have 18 tunnelling men and 70 tributaries working in our mine. The whole number of persons employed underground and at surface is 320. In looking at our prospects, I consider them very good. On the tin lode we have not been able yet to reach the best places worked by the former party; one is Gooding's bottoms; we are approaching this spot. In the 50 we hope to meet with a slope of ground of good quality work. The work broken here produced from 5 to 6 cwt. of tin per 100 sacks during the last working. The 60 will be the main level for opening up this part of the mine. To the west of Cock's shaft a good branch of tin is gone down below the 40; this can only be opened up by driving the 60 west. Hitherto we have only been working on arches of ground left by other parties. They are opening tribute ground. Some time since we commenced driving a cross-cut 2 fms. west of the engine-shaft, in the 40. We have driven through the lode 3 fathoms, and find some good stones of copper and tin, worth 4 cwt. per 100 sacks; we have not found anything here as yet that will work on tribute: we have still another part of the lode to cut through, which we intend to do before suspending operations. We have likewise commenced driving the 40, west of Cock's shaft, on the south part of the lode; this is opening tribute ground that will work at 1s. or 1s. in 12; I have put two men to stop the back of this level, to break itself for our stamps. We find the best part of the lode in the bottom of the level, about 10 fms. east of Gooding's shaft. We have four men stopping the back of the 23; the lode is 4 fms. wide, and worth 12f. per fathom; price for stopping 10s. From what we have done at this place, we believe this will prove to be a good piece of ground—ground that will work at 10s. in 12. This is all we are doing in tribute work on the tin lode. There is not much change, on the whole, in our tribute department during the last three months; the average tribute is 10s. 6d. Our copper tribute is not looking so well at present; we have two pitches working on copper, at 7s. and 8s. in 12. Some of the tin tributaries are breaking a little copper too. This department will be variable, in consequence

invested may be confidently anticipated as soon as the deposits of ore are reached, which the present favourable indications lead your directors to believe cannot be now far distant. A detailed report from the captain of the mine (Joseph Cook) having been read, the following, from Mr. W. Richards, the agent of Hingsdon Down Consols, was read:—
Tavistock, April 11.—Agreeably with your request, I have this day inspected the mine, and hasten to make a few brief remarks thereon. The engine-shaft is sunk in all 37 fms. from surface. The first 19 fathoms the lode therein varies in size from 6 to 8 ft. wide, composed of gossan, quartz, mica-schist, and spotted with yellow copper ore; at this depth the lode passes out of the shaft. A cross-cut has been driven from the bottom of the shaft to intersect the lode; some branches have been met with, varying from 6 to 8 in. wide, evidently belonging to the lode; the driving, however, is being continued, to ascertain if more of the lode remains south. The branches being in close proximity with a cross-course, it is probable that, when extended, good results will follow. On the north lode an adit has been driven, altogether about 160 fathoms; the lode, during the driving, has varied in size from 3 to 4 feet, presenting in places unmistakable evidence of being much more profitable at an increased depth. From the present end of this driving a cross-cut is being driven south, with a view to intersect known lodes in that direction, and when reached will be 60 fms. from surface, and it is more than probable you will find them more or less productive of copper ore. In conclusion, I have no hesita-
tion in stating my fullest conviction that, with perseverance and outlay, you will be amply remunerated; and I fully concur with your agent as to the manner proposed in work-
ing this adventure in future, and the manner in which the mine has been conducted.

The subjoined statement of accounts was then submitted:—

Da.—Balance from last account	£924 10 2
Interest and discount	375 14 8 = £9900 4 10
Ca.—Mine cost, from March 1, 1854, to Feb. 28, 1855	£1427 10 0
Merchant's bills	1155 17 9
Balance of engine	850 0 0
Captain and purser's salary, &c.	494 10 1
Rent of office, assays, &c.	429 18 2 = 4267 16 4

Balance in favour of adventurers £5632 8 6

The CHAIRMAN, in rising to move the adoption of the report, said it gave a full and ample account of the present state and future prospects of the undertaking, that it left very little for him to comment upon. They were all aware of the position of the mine—on one side was the Devant Great Consols, one of the richest mines in the kingdom, and on the other the Bedford United, a good dividend-paying mine; it was also bounded by the Hingsdon Down, and abutted upon the Old Gunnis Lake, a mine now worked out, but which formerly paid excellent dividends to the shareholders. All practical miners, who had seen the property, believed it to be very valuable, and only required time to develop its resources. During the past year they had proceeded with prudence and all possible vigour. The mine embraced a large tract, and they were working upon two separate points; in the northerly part they had driven an adit 160 fms., and were down 65 fms. from surface, to intersect all the lodes, which they might do in a few weeks, and a large lode was expected in that direction. On the southerly lode the engine-shaft was sunk 37 fms., and all the agents he had conversed with were of opinion that there was every chance of its turning out extremely rich, as it was fully believed in depth all the branches will unite, and a rich deposit of ore will be found in that direction. He had the sanction of the agents for what he was stating, which the shareholders had an opportunity of knowing from the weekly reports, published in the *Mining Journal*, by their captain, whom he was bound to say, took the prudent course of writing within the mark; but at the same time, to furnish the best information, they had taken the opinion of the most eminent men in the locality, and amongst them Mr. Richards, of Hingsdon Down, who thought they had a most excellent piece of ground. Since the last annual meeting, he (the chairman) had visited the mine, and, so far as he could judge, everything was carried on in the most satisfactory manner; the buildings were substantially erected, and the steam-engine was one of the most perfect he ever saw, performing its work well, and only consuming eight tons of coal per month. Mr. Richards observes that the lode in the adit presents unmistakable evidence of being much more profitable at an increased depth, and, in addition, he would observe that he had little doubt but, in a short time, the shareholders would be rewarded for their patience and perseverance.

Mr. BEALE, in seconding the adoption of the report and accounts, remarked that, through the care and ability of their excellent chairman, the shareholders had been spared expenses that other companies had fallen into. About twelve months since, when every gossan was pronounced to be auriferous, the gossan from these mines was operated upon, and produced such extraordinary results that, if true, it must have made the fortune of the smallest shareholder. However, the chairman did not place confidence in the assays from the machine, and, after carefully experimenting himself, felt satisfied it was a delusion, so that, through the scientific attainments of Mr. Sme, the adventurers had been saved the expense of purchasing machinery that had turned out worthless.

The report and accounts were then unanimously adopted.

Mr. BLAKE then proposed the following resolution:—"That the cordial thanks of the meeting are due, and are hereby given, to the committee, for the very able and assiduity displayed by them in promoting the interests of the shareholders."

Mr. DELAMERE seconded the resolution. During the last twelve months the total outlay was not more than £3000, and the balance in hand upwards of £3000, which must be satisfactory to the shareholders generally. He felt confident the operations were carried on with vigour and economy, and that the affairs of the adventurers were watched over by men of business. (Cheers.)

The resolution was then carried unanimously.

The CHAIRMAN, in returning thanks, said no doubt gold was distributed through many lodes, but insufficient to pay. Parties only entered into speculations of this sort in the hope of obtaining profitable results. He warned several at the time of the gold division, and they had found out to their cost that he was correct. The committee would continue to use their best endeavours to bring the company to a successful result; and he firmly believed they had as valuable a piece of ground as any untried in this country.

A vote of thanks was next proposed to Mr. Sowell, the auditor.

Mr. SOWELL said most of them were aware that he had a great deal to do with accounts in the City of London; but from the admirable manner the South Devon accounts were kept, his duties were very light, and as a proof of the manner their affairs were managed, discount was deducted from every merchant's bill.

A lengthened discussion then ensued as to the receipt, by the secretary, of a telegraphic despatch on Saturday, signed by Nicholls, of Tavistock, stating that the lode had been cut, and proved of great value. The chairman, suspecting it was a hoax, got out for jobbing purposes, ascertained by telegraph that the name of Mr. Nicholls had been forged, the meeting recommended the directors to prosecute the parties, if they could be discovered, as it was stated that five other similar despatches had been sent to different parties in London. The proceedings then terminated with a vote of thanks to the chairman.

GREAT TREGUNE CONSOLS.

A meeting of directors and shareholders, held at the offices of the solicitor to the company, 26, Bucklersbury, on the 13th inst., and adjourned to Monday, the 16th, the following report on the prospects and working of the mine, received from Captain Seward, was read and adopted:—

Dowgate, April 12.—The time having arrived for me to give you a true and correct statement of your important undertaking, I must beg to call your attention to my report made in January last, wherein I stated that the lode in Hobler's shaft had much improved since the then previous meeting. You then saw on the table stones of very rich copper ore that had been broken down from the shaft two days previous to that meeting being held; and, although the severity of the weather during the winter months has considerably checked our progress in sinking the shaft, yet I can, with the utmost confidence and pleasure, state to this meeting that the lode has improved very considerably since I made my last report. Gentlemen, you have before you such facts for these statements as require little or no comment from me. The large stone that sent you a fortnight since, I broke 2 feet from the top, above the present bottom of the shaft. The other stones (which you see are all but solid copper) were broken yesterday from the lode in the bottom of the shaft, and before I left the mine to-day, the men informed me that they had just blasted a hole in the eastern end of the shaft, which tore up some very rich ore, equal to any that they had hitherto seen. My weekly reports that have of late been published in the *Mining Journal* have been very sanguine; but sanguine as they may appear, they are facts that cannot be contradicted by any practical man. The composition of the lode for the last 7 fms. we have sunk has been of a very promising character, composed chiefly of fluor-spar or can (commonly called by miners), with very rich stones of bluish, grey, and yellow copper ore, similar to the stones you have before you, but not so rich as we have found it the last 6 ft. we have sunk. We have now coming in the lode at the eastern part of Hobler's shaft a run of rich gossan, mixed with grey copper and malleable or native copper, some of which you have before you. We have also branches of fluor-spar, spotted with copper, slipping from the south part of the shaft into the lode; these branches are intersected in an oblique direction, and I beg to say, from the most splendid appearance of the lode now in the bottom of the shaft, that I cannot but think we are very near a rich source of ore.

Gentlemen, I cannot conclude my remarks on this subject without reminding you of Capt. Maynard's statement, in his most valuable report to you some months since, wherein he states that at a deeper level we may expect an abundance of copper; and although it is too tedious for me to state the remarks he made to me on the mine, yet I do not scruple to say that I am doing him no other than justice when I inform you the report of that talented agent has been so far verified.

CARKE'S STAFF.—We are driving west on the course of the lode here at the bottom of shaft, which is about 35 fms. deep from surface. Although the lode is not rich in copper, yet it is gradually improving as we drive to hill. We are getting into spar, of a similar nature to that in Hobler's shaft. Our smiths' shop, counting-house, material-houses, and carpenters' shop are completed, and we have sufficient timber, with out erecting new work, to last nearly two years. Our machinery is at present in excellent condition, and works extremely well; and, in conclusion, I beg to say that it is my impression the day is fast approaching when the Great Tregune Consols will be styled one of the richest mines in the eastern district of Cornwall, and her barren hills will be found far more valuable than mere rough grazing for cattle.—J. S. Seward.

THE SPECIMENS alluded to in the above report and laid on the table were much admired by those present, and had also been examined by some leading mining men, who declared the mine must eventually turn out successful from whence such specimens had been produced at so shallow a level.—W. H. POLLARD, Sec. pro tem.

PRODUCE OF IRISH MINES.—The next sale of copper ores by public tick-
eting on the 28th of May, includes from the mines of Ireland 863 tons, consisting of—
Knocknahon, 505 tons; Berehaven, 199; Holycross, 74; Kenmare, 66; Cronabane, 17; and Tigrony, 2 tons. On Tuesday, there were sold—from Berehaven, 106 tons; and Lackashore, 39 tons.

DEATH FROM CARBONIC ACID GAS IN A COAL PIT.—An inquest was held before Mr. W. S. Rutter, one of the coroners for Lancaster, at Tarnsworth, near Manchester, on the body of John Tonge, aged 16, who worked in the Top Level East, one of the collieries belonging to the Bridgewater Trust, where a subterranean branch of the canal enters the mine for purposes of transit. From the evidence of the father, it appeared that his son, not coming home by half-past four o'clock, went down the pit to seek him, and found him lying on the coal in a barge, apparently asleep, when Tonge was found to be quite dead, and two companions insensible, but they were recovered. One of these, W. Longworth, stated that he found deceased lying in the barge, and thinking him in a fit, placed him in the barge, which he unmoved, and subsequently fell senseless himself. The underclocker of the colliery explained that, in driving the level, the men had broken into the Hutton Colliery, where a large furnace was kept lighted to increase the air current; this had gone out on the Saturday, and would cause the "return air" to penetrate the levels, carrying sufficient "white damp" to cause suffocation; the communication was about to be bricked up, so as to avoid similar casualties. Verdict, "Accidental death."

NOTES ON IRISH MINES.

In the Journal of the 17th February we inserted a summary of a description of the lead mines of Lluganure, County Wicklow, by the Rev. S. Haughton, M.A., Professor of Geology in the University of Dublin; and having received the third number of the author's *Notes on Irish Mines*, we now proceed to notice his account of the copper and lead mines of the Kenmare Valley, County Kerry. This valley extends eastwards from the town of Kenmare to the village of Kilgarvan about eight miles, varying in breadth from half a mile to one mile. Its valley extends eastwards of lower carboniferous limestone, forming an inversion of strata, similar to those occurring in the south of Waterford and Cork, in Cornwall, and in the Eifel, as described by Sedgwick, Murchison, and other geologists, and by which inversion of strata the arenaceous, red mica-schist, and calcareous slates to the south appear to overlie the limestone of the valley. The strike of the limestone and other beds is very constant, averaging from east 27° north to east 12° north; and the position of the planes is well shown in a shaft on a copper vein at Greenane, where there is a highly characteristic bed of calcareous argillaceous slate, which, on analysis, produced argillite, 49.25; pyroxide of iron and alumina, 2.03; carbonate of lime, 38.74; carbonate of magnesia, 7.82; water, 1.26=99.11. The author here observes that this limestone in character closely approximates to that of Whiting Bay, Ardmore, accompanying veins of copper ore, and examined by Mr. Cotton, proving that the limestone beds of the Kenmare Valley belong to the lowest group of carboniferous limestone. Not the slightest trace of fossils could be found in the limestone of the district. The limestone is uniform in character, highly crystalline, with a silty structure, exhibiting frequent planes of bedding and cleavage. The inverted beds south of the limestone consist of a series of mica-schist, coarse, thickly bedded sandstones, dark coloured and silty beds, and calcareous slates, containing nodules of clay, ironstone, and iron pyrites still further south, interstratified with thick beds of green grit, some of which are well exhibited in the road cuttings from Kenmare to Bantry. The whole valley near Kenmare is full of travelled boulders, many of which are grooved and striated, as if held while being pushed along a sharp surface, which has cut and polished them. The mineral lodes in the Kenmare Valley consist of copper and lead, the former being developed at or near the boundary of the limestone, both north and south. The lead lodes are confined exclusively to the limestone, in parallel bands, near the northern boundary. Both copper and lead lodes are nearly conformable to the bedding of the limestone in strike and dip. The Ardtruly copper lode occurs at the northern junction of the limestone and red slate, in the townlands of Ardtruly, about 5 miles east of Kenmare. It has been worked to a depth of 65 fathoms from surface, having near the engine-shaft the limestone for its south wall, and the red slate for the north; its direction is nearly due east and west, underlying south for 40 fathoms 2 feet in a fathom, and ultimately acquires a small underlay to the north. The ore varies considerably in character and quality, but consists principally of argilliferous arsenical grey copper, which, on analysis by Mr. Corrigan, in the laboratory of Trinity College, Dublin, produced—silica, 5.29; sulphur, 25.32; arsenic, 16.07; antimony, 3.70; copper, 40.26; iron, 4.54; zinc, 3.18; silver, 0.15; sulphur of mercury, 0.56=99.07. The purple, and ordinary yellow copper ore also occur, particularly at deeper levels. The other copper lodes are the Forge, the Trinity, and the Trinity South lodes; and those of lead, the Shangarry, the Shangarry South, and the Killowen, lodes. The copper lodes produce purple, yellow, and grey ores, and the lead ore is arsenical. The seven lodes named are the principal in the Kenmare Valley, and, although they hold out the promise of a fair return for a judicious outlay of capital, none of them have yet been worked on a scale of sufficient magnitude to develop their resources. It is worthy of remark, in considering the position of these copper lodes, to observe that they occur in the same geological position as some of the best lodes in Ireland; as the Gurnadine lode, at Silver-mines and Barchem, in the County of Cork; which latter, in fact, may be considered as occurring in part of the same valley, and in the red slates south of, and older than, the carboniferous limestone of the Kenmare Valley.

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Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The lode at Field's engine-shaft, sinking under the 130 fm. level, is worth for copper ore 20s. per fm. The north part of the lode in the 130, east of this shaft, is worth for copper ore 30s. per fm. The lode in No. 2 winze, sinking under the 120, east of this shaft, is worth for copper ore 20s. per annum; the lode in the 120, east of this shaft, is worth for copper ore 10s. per fm. The lode in the 80, east of the flookan, is about 3 feet wide, dredged with ore, but nothing to value, now being driven by six men. The cross-cut in the 60, south of Fryer's shaft, is being driven by four men. There is no change in any other of the tutwork since the last report. The tribute department looks just the same as for some time past.—MATTHEW WHITE : April 16.

ALTARNUN CONSOLS.—We have not taken down any lode in the stopes in the back of the 20 since last report. The lode in the bottom of the 10 is 3 ft. wide, yielding about 3 cwt. of tin per 100 sacks. There is a little improvement in the lode in the shaft.—R. REYNOLDS : April 16.

BALLYVIRGIN.—Since my report of the 10th inst. (which stated the lead to have been superseded by copper), the lode in the 10 fm. level, south of engine-shaft, has entirely improved, and has every appearance of still further improvement; the lode will yield 7 cwt. of copper ore per fm.—R. W. SMITH : April 17.

BEDFORD UNITED.—There is no change in the 130 fm. level east. In the 115 fathom level east the lode is worth 5 tons of ore per fathom; no lode taken down in this level west since last report. Jeffery's stopes, in the back of this level, are still worth 6 tons of ore per fathom; we are driving by the side of the lode in the 103, Jackson's stopes in this level are worth 6 tons of ore per fm. In the 90 fm. level east the lode is 3 feet wide, producing very fine stones of ore, more promising than for some weeks past. There is no change in the 80 fm. level.—J. PHILLIPS : April 18.

BOILING WELL.—This month we have sunk 2 fathoms in the engine-shaft, the ground is still favourable for sinking; should it continue we hope to sink the same next month; the engine-shaft is now 5 fms. below the 30. The western end in the 50 is still producing good stones of ore, leaving high tribute ground; the eastern end in this level, on the south part, will produce good stones of ore, also leaving tribute ground. We have cut the north wall in this end, and have set to rise through to the 40, which will ventilate the 50, and make a good footway; the north part of this lode is about 1 ft. wide, composed of spar and peat, sprigged with ore. The eastern end in the 40 has improved very much since my last report; the lode in the end at present is 18 in. wide, composed of spar, peat, and copper ore, and has a promising appearance, and I have every reason to think that this end will make a productive one again. The tribute pitches, on an average, are looking fair.—G. REYNOLDS : April 14.

BOLENOWE.—In the 50 fm. level east the lode is 3 ft. wide, with a kindly appearance. The lode in the 30 west continues 2 ft. wide, composed of gossan, prian, and soft spar. In the 20 west the lode is 1½ ft. wide, producing rich stones of black and grey ore.—W. ROBERTS : April 14.

BORINGDON CONSOLS.—The shaft is cased and divided down 12 fms. below the 24, or 64 fathoms from the surface, and we shall resume sinking next week. The 24 east presents at the present time a much more favourable appearance than usual; the lode is from 4 to 5 ft. wide, and contains some very fine stones of ore, with a considerable quantity of jack, that will, we hope, add to the returns. In the 24 west we are driving a cross-cut, to intersect the north part of the lode, which we expect to reach in about a fortnight. We resumed driving east in the 12 on Thursday last; the lode in the present end is 3 feet wide, producing some good saving work, and as there is a large stream of water issuing from the end, with other favourable indications, we are looking forward to further improvements. We have about 8 tons of crop ore dressed, and about 40 tons of seconds, which can be sampled whenever we think proper. We have also 6 tons of jack cleaned, and we purpose making it 10 tons, and then send samples to the smelting company.—J. WOLFRAM : April 15.

BOTTLE HILL.—The cross-cut in the 123 is much the same as last reported. The lode in the 113 has during the past week much improved, and is producing good work for tin. The two stopes in the back of this level also show an improvement, and are yielding favourably. In driving south in the 100 we have cut into the north part of the lode, and have taken some very good stones both of tin and copper therefrom. We have nothing particular to mention as regards any other part of the mine.—J. GIFFORD : April 17.

BRYNFORD HALL.—The sump sinking on the junction of the Milwir, with the oblique vein, has, I am glad to say, improved. In the other sump, southward, we have a vein 7 ft. wide, just coming down into the bearing ground, and I entertain confident hopes of good paying ground between.—W. FRANCIS : April 19.

BRYNTAIL.—The 10 east, on the new lode, was resumed last Monday morning, in which there is some very fine ore; there has been no lode taken down since that time, but should it turn out agreeable to the present prospects, it will produce about 10 cwt. of ore per fm.; the end is now in a similar channel of ground to that which produced the deposit of ore found some few fathoms west. In consequence of our trenches being deep, I have only seen the lode in one place—in back of the eastern ground; in that place it produced some ore—in fact, as much as could be expected by merely opening on the back of the lode. I hope to see it further east in the course of a day or two. The parcel of ore will be all delivered at Newtown on Tuesday next, when I shall take the necessary steps to forward it to Holywell for sale.—JAMES HOACH : April 18.

BUTTERDON.—The engine-shaft is sunk 9 fms., 1 ft. below the 30 fathom level, where the lode is much the same as when last reported.—W. BRYANT : April 17.

CAE GYNON.—The 20, east of engine-shaft, is more promising than last reported, being composed of blende, lead, and spar. The men from the 20 west are employed in casing and dividing the shaft from the 10 to the 20. As soon as this finished, they will resume their driving. The winze under the 10 fm. level, 10 fms. west of engine-shaft, is looking well. The stopes are also yielding fair quantities of lead ore. Our surface operations are going on well.—E. STEEDMAN : April 17.

CALSTOCK CONSOLS.—In the north cross-cut, from the eastern end, the caunter branch has been driven on for 6 feet; its average size is about 1 foot, and contains some very rich copper ore; from what has been done on it, and its bearing, it is evident this is not the lode we are in search of, and the cross-cut is, therefore, being driven still further north, where the ground is very favourable for breaking. In driving east on the Edward lode a small spar cross-course has been cut, containing stones of lead ore. A very large stream of water is issuing from the bottom of the level at the point of the lode, against the cross-course. No lode has been taken down to the east of the cross-course. In the western level there is a large and kindly-looking lode coming in; it is at present composed of quartz of a soft nature, and contains a quantity of mundic; the killas by the side of the lode is also of a soft nature.—W. B. COLLOM.

CALSTOCK UNITED.—On Saturday last the men were paid their wages, and the following bargains set:—The 60 end to drive west, by four men, at 3s. per fm.; the 60 cross-cut to drive south from the plat, by four men, at 3s. per fm. The sumptuous have a bargain to put in pent-house, fix eastern, 20 fms. of ladders, and make every thing ready for sinking, for 18s. 10s. We shall want to get up the pumps from the North Mine, below the adit, when we sink again, and hope to get all done during this month.—W. COOKE : April 13.

CAMBORNE CONSOLS.—The lode in the 10 fm. level east, on the caunter, has not been taken down this week. Other tutwork bargains are progressing favourably.—W. ROBERTS : April 14.

CAMDWR MAWR.—The stop in the 5 fm. level is daily improving; the copper is giving place to the lead. We are driving east in the 12, in which good strings of lead are appearing. The round bouldles commenced working on Thursday last. By pay-day I hope we shall have 10 tons of ore for sale. Our main attention is directed to the completion of the drawing-machine, which, if all well, will be accomplished by about the end of the month. We have an increased number of hands upon the market since my last report.—J. WILLIAMS : April 14.

CARRACK DEWS UNITED.—We have now nearly completed our preparations for further sinking in Battery shaft; we hope to commence again with eight men tomorrow. In the 20 east we have driven about 2 fathoms, the lode here at present is poor; driving by eight men, at 2s. per fathom. At Eley's shaft, it will take us nearly this week to complete our work to enable us to commence sinking under the 22 fm. level, by eight men; we are driving the 22 east, by three men and three boys; we have been going by the side of the lode since the setting day, therefore we cannot quote its value till we take it down; it looks well at present; there are different branches of rich copper droppers falling into the lode. We have driven about 8 ft. since the setting day, from which driving we have taken out not less than 1½ ton of almost solid copper, and from the lode when taken down proves as good as it promises, there will be another ton at the least. We can drive this level as far as we like without danger; present appearances warrant us in expecting it will prove a profitable one. We commenced dressing copper yesterday.—M. DUNN : April 17.

CARVANNALL.—At the engine-shaft sinking under the 106 fm. level the lode is 3 feet wide, producing mundic, iron, and stones of ore. No alteration in any other tutwork bargains. The tribute pitches are looking tolerably well.—W. ROBERTS.

CUBERT UNITED.—At Trebaskan, the lode in the 65 west end is 15 inches wide, composed of quartz, prian, and flookan, with spots of lead. The lode in the 55 west end is about 18 inches wide, composed of soft spar, prian, and flookan, with some good stones of lead; it is looking very promising indeed, and the ground is favourable for driving. The stopes in the back of this level are worth 8 cwt. of lead per fm. The stopes in the back of this level, east of James's rise, are worth 3 cwt. of lead per fm. At Trebaskan, there has been no lode taken down in the 60 north end during the past week; the same is applicable to the 66 south end. The lode in the 55 north end is 15 inches wide, worth about 2 cwt. of lead per fm. The stopes in the back of this level are worth 7 cwt. of lead per fm. No lode has been taken down in the sump-wins of the past week. On Wednesday evening last, the main pin of the balance-bob at Trebaskan engine-shaft broke, which arrested our progress in that part of the mine for the last three days, but at present the engine and pitwork are in good working order.—J. TANWIS : April 14.

CROSSGILL HEAD CONSOLS.—The weather has just set in fine, enabling us to commence dressing the ores. The whin will be erected I expect next week, and also a good ladder-way put into the north shaft. The masons have commenced building the new shops, and will complete them as fast as practicable, after which we shall be able to increase the number of pickmen and dressers. I see no alteration to report at present in the underground department, but have still good ore in the forebush, and bottom of the 17 fm. level. Our men next week will chiefly be employed cutting out the place for the whin, putting in ladder-way, laying rails in the 17, and other surface work.—T. DICKINSON : April 16.

CWM DARBN.—In the engine-shaft, sinking under the 30 fm. level, the lode of the lode being carried is about 3 feet wide, yielding saving work for lead and copper ore. In the 30 west the lode is 3½ ft. wide, producing good stones of lead ore. In the stopes in the back of the 30, east of Morgan's winze, the lode is 5 ft. wide, yielding 1½ ton of copper ore per fm.—ARTHUR WATERS : April 16.

CWM DYBLE.—We have commenced working at No. 1 stop, No. 6 level, which opened its former size and quality. On clearing the higher levels, we find a great deal of ore accumulated in them, which has prevented the rollers getting out on this week; this being about clear, the ore will now be got out, and we shall take on our forces for active operations. The stamps have been at work, but not having sufficient hands, very little of the ore has been dressed. A supply of ore having been got down to the stamps, this week we shall get down the mill work.—T. COLLIVER.

DEVON BURRA BURRA.—The cross-cut which is driving towards the new lode in the break still further improves in appearance as we proceed, the ground consisting of light blue killas, with branches of spar, and spotted with ore. There is also a large stream of water now issuing from the end, and which we are well prepared to meet, as our pitwork and machinery are in good working condition.—J. LORD.

DEVON BULLER.—We are getting on with all speed with our work; the engine-house is completed, and the engineers will commence fitting to-day.—W. NEILL.

DEVON TIN.—At the North Mine, since last report we have driven 4 ft. in the 15 fathom level, and during the past week the men have taken down the lode; the ground in the end continues hard for driving. We have set on tribute, to five men the pitch west of the engine-shaft, to five men the eastern pitch, and to two men in the back of the 15 west. We have made everything ready for dressing, and hope shortly to get the tin ready for market.—J. THOMAS : April 15.

EAST BLACK CRAIG.—In the 22 end west the lode is spotted with lead, and a white rider rock coming in the south side; the lode continues of a good size, with a strong stream of water coming from the north side. The 33, driving west on the south lode, is much as last reported, and producing good saving work. We expect No. 1 cross-cut west to hole to this end in a day or two. In the 33 end east, the south lode has improved for ore, and is a very kindly lode. In No. 1 cross-cut east, driving south in the 22 fathom level, the men have gone through some good branches of spar and lead, similar to what was in the cross-cut in the 27 below. We have set a pitch to-day in the back of the 33, on the south lode.—R. WILLIAMS.

EAST FRONGOCHE.—Our pay and setting was on the 9th, when we set the shaft to nine men for the month, at the former price, 21s. per fm. The shaft is now about 8 fms. 3 ft. below the 20 fm. level; there is no material alteration in the ground since my last; should the present pare remain with us, I hope to report of a greater progress than I have hitherto done. Our machinery is working satisfactorily.—THOMAS PASCOR : April 12.

EAST GUNNIS LAKE AND SOUTH BEDFORD CONSOLS.—The lode in the engine-shaft is 2 ft. wide, yielding good saving work. In the 49 west the lode is 2 ft. wide, yielding 1½ ton of ore per fm. The middle lode, in the 36, west of the Red whin-shaft, is 2 feet wide, yielding about 2 tons of ore per fathom. In the winze sinking in this level the lode is 2 feet wide, yielding 3 tons of ore per fathom. We have fixed the flat-rods to the Red whin-shaft, and commenced sinking; the lode is 4 ft. wide, producing good stones of ore.—J. PHILLIPS, Jun.

EAST POLGOOT.—The 57 fm. level cross-cut, north of the engine-shaft, is driven 14 fms. 2 ft.; I think we have about 6 fms. more to drive to the lode. The 57 cross-cut south is driven 8 fms. We are getting on with all speed to see the lode, which I hope will be accomplished in the time calculated.—April 14.

EAST WHEAL GEORGE.—The ground in the engine-shaft, sinking under the 4 fm. level, is composed principally of spar, and at times good stones of ore. The water is exceedingly strong; and this, combined with a hard capel, makes it very sparry for sinking. The shaft is down about 6 fms. 2 ft. below the level.—April 14.

EEF DONALD.—The lode in the antimony end is 3 feet wide, with some very fine looking spar and flookan, and some good spots of lead, very much the nature of ground as when we had the lead. The branch of lead in the rise in the back of this level is getting very small, I do not see it will pay for stopping any longer. I intend next week to put the men to sink on the bunch of lead we drove through. The end driving east on the lode south of this is looking very promising for lead, and worth 6 cwt. of good quality lead ore per fathom. The end driving west, on the Sunday, is the same as last reported, spotted throughout with lead. To-day we have opened on the back of this lode, at a higher point on the eastern hill, but we cannot say anything about it for a day or two, as we only saw a small part of it. I consider the road made.

GARREG.—We have now got ready the whole of the new engine-shaft, in the limestone; we have completed the lode, or plat, and secured it well with timber. We have met with a small lode in the engine-shaft, bearing 25° from east and west; this lode yields a little lead in sinking. We are now 22 fms. deep from the shaft, and are progressing favourably. We have commenced building the engine-house. I have suspended the 40, driving west, for the present; we have only pipe air, and the men cannot get the level clear from smoke. When we get our new engine-shaft through we shall have plenty of air, and be able to drive the level both cheaper and quicker. We have no water in our washing-place, so that we shall be obliged to carry the ore to old Garreg adit level to be dressed.—W. RAMSEY : April 19.

GREAT CAMBRIAN MINING AND QUARRYING COMPANY.—The Maestryfar set, which is one of three composing the above company, is situated between Dolgelly and Barmouth, and is surrounded by some of the most important mines in North Wales. About a mile to the north-west is the famous gold mine, Clogau, where so much gold was obtained near to the surface; and a quarter of a mile to the east is the celebrated Prince of Wales Mine, which is now commencing to work in earnest for gold, raising auriferous lead, as well as finding good specimens of native gold. Maestryfar has eight well-defined lodes running through it, with a general direction of a few degrees north of east. Five of these lodes dip to the south, and carry lead and blende; while the other three lodes have a northern dip, which is the inclination of all the gold-bearing lodes yet worked upon in North Wales, and are more or less charged with gold and silver, lead and blende, and in some places the quartz is beautifully interspersed with visible and moss-like gold. The lodes No. 1, 2, and 3 have been driven upon, and all show lead, blende, and copper. The lode No. 3, which has been most worked upon, has produced marketable blende and lead; and there are about 30 tons of strong blende, with a little gold copper, lying in the level, and a considerable quantity more can be stopped down. On No. 4 a cross-cut has been driven to intersect the lode, from which good ore has been raised, and, being a very wide and strong lode, might be worked with profit for blende and lead. Lodes No. 5 and 7 have not yet been worked upon, but show very strong in the bed of the river—the lode No. 7 being 9 ft. wide, and will, when opened, most probably afford those auriferous results which its inclination and characteristics warrant, from the similarity that it has with other gold lodes. The lode No. 6 has been driven on for 35 fms., and is about 2 to 3 ft. wide, with an underlie north about 1 ft. in the fathom; the last 3 fms. on the north side of the lode, which shows a facia of very hard quartz, highly impregnated with visible gold, which can be seen in the roof of the level, on the south side, and in the bottom, to that extent. The lode at this spot will make about 5 tons per fm., which I could not value, considering the large quantity of gold visible, at least from 30f. to 35f. per ton. At 40 fms. east from this point, a shaft has been sunk on the same lode to the depth of 12 fms., which, by driving 2 fms. in the bottom, has cut the lode from 3 to 4 ft. wide, and produces magnificent ores of blende and lead, which will be very valuable for the silver and gold they contain. This shaft will have to sink 10 fms. deeper to be on the same level with the drivings where the gold is visible. On No. 8 a cross-cut has been driven 13 fms. to cut the lode, which is about 4 ft. wide, underlying 3 ft. in a fathom; lead, blende, and copper are mixed throughout the lode, and there is no doubt that, when more work is done on this lode, visible gold would be found; this lode will fall into No. 7, although not within the boundary of this set. Nos. 3 and 4 intersect one another at about 35 fms. from the mouth of their respective levels; after the junction of these two lodes it runs east for about 100 fms., and intersects No. 2, at which point an opening has lately been made on a few feet from the surface, and some beautiful stones of good lead raised. On the dressing-rooms there are about 22 tons of auriferous and argentiferous blende ready for market, and a small heap of gold and silver-bearing lead. On different parts of the property there are about 200 tons of ore fit for dressing. The general features of the lodes promise, as the workings are prosecuted deeper, they will yield large returns of ore; but the country at present being so very hard, that it was not for the fact that the lead and blende produced is rich in gold and silver, it might cost more at present to raise it than it would realise. As far as the gold quartz is concerned, it is so rich, and the appearances are so good, that no mine in North Wales has a better opportunity of proving the value of rich gold ores under economical and practical treatment, and I have no hesitation in saying that the results will be enormous, the prospects being as favourable; and I can only hope that both directors and shareholders will, by a firm union, avail themselves of the good opportunity now afforded to them.—J. CALVERT : 189, Strand.

GREAT CAMPBELL CONSOLS.—The lode in the 30 fm. level south is very much improved, and the men can make faster progress. The lode is getting more settled than it has been for the last 2 or 3 fms. driving, and producing very good stones of lead ore. In the 30 fm. level north the men are still cutting through the lode, which is producing good specimens of lead ore. Mr. Low has been here this week, and sampled five parcels of 5 tons each, which have completed the sampling of 50 tons of quartz.—ROBERTS : April 14.

GREAT COWARTH.—The ground in the 30 fm. level south is very much improved, and the men can make faster progress. The lode is getting more settled than it has been for the last 2 or 3 fms. driving, and producing very good stones of lead ore. In the 30 fm. level north the men are still cutting through the lode, which is producing good specimens of lead ore. Mr. Low has been here this week, and sampled five parcels of 5 tons each, which have completed the sampling of 50 tons of quartz.—ROBERTS : April 14.

GREAT HEWAS UNITED.—The north lode, in the 56 fm. level, is 1½ feet wide, good average work; in the 46 fm. level, 4 ft. wide, good saving work; in the 36 fm. level, 20 in. wide, very good work; in about a couple of months (when opened out properly) these places will increase the returns. I do not calculate cutting into the north lode in the eastern cross-cut for some two or three months, being a distance of 12 or 14 fms. from lode to lode, just in this place; but after this lode is cross-cut the various places in the various lodes, it will enable us to lay out the lode for stopping at a rapid rate. I am satisfied that every shareholder may calculate his interest in Great Hewas pretty safe; but it will require some months to accomplish the work in hand to give it fair play. We shall sell this month's tin to-morrow.

GREAT SORTRIDGE CONSOLS.—Hitchin's engine-shaft is now 4 f

into a dark grey limestone, with a point of clay and spar, 9 in. wide, on one side, with the beds dipping fast before us. The pitch in the bottom of this level will produce from 8 to 8 cwt. of lead per fm. In the 25 fm. level, driving north-east, we have met with the white carbonate of lime, and expect to intersect the lode in about 1 fm. more driving, as the stratum is favourable for meeting with the lode. In the 30 fm. level west the lode in the winze will produce from 6 to 7 cwt. of lead per fm. In the 10 fm. level the lode is running south of Michel's shaft; the pitch in the back of this level will yield 12 cwt. of ore per fm. The pitch at the winze, in the bottom of the east and west lode, is rather poor, but producing good stones of lead ore. At Rose Hill shaft, we are sinking a winze below the 40 fm. level to prove the lode, and clearing out the east and west lode upon the string lode, ready for driving eastward. We are progressing with our dressing department, and expect to be able to sample 20 tons at our next monthly sale.—W. RAMSDEN : April 19.

EMBROKE AND EAST GRINNIS.—The 50, east of Hunter's, on the north lode, is holed, which has given us a good ventilation; we shall at once resume the sinking of the winze below this level by six men. The stopes in the back of this level will produce 2 tons per fm., worth 30. per ton. The 90, west of Reid's, on the north lode, is 2½ ft. wide, and will produce 1½ ton per fm., worth 90. per ton. We are glad to say the men are working well, and progressing very satisfactorily with the 112 fm. level cross-cut at Reid's.—**East Crinan.**—In the 124, east of engine-shaft, the lode is 3 ft. wide, producing good stones of ore; in the west end in this level we have not reached the main lode, consequently we have nothing new to report here. There is no alteration in any other of our levels in this part of the mine during the past week, as the men employed are decking their lodes. The 50, east of Hunter's, on the tin lode, we are glad to say is looking pretty well, worth quite 120. per fm. We have not taken down the lode in the stope during the past week, but shall do so in the early part of the next, when we will report its value.—W. ANNEX : April 14.

PENHAUGER.—The lode is 4 in. wide, at present poor for lead.—W. BRYANT.

PEN-Y-GEILL.—We have four men driving upon the branch lode in the 10 fm. level. The pitch in the back of this level is not so productive as when last reported on. The lode is 18 inches wide, composed of carbonate of lime, and producing good stones of lead ore.—W. RAMSDEN : April 19.

PERRAN CONSOLS.—The 55 fm. level has been driven in the past week 8 feet; the lode since last report has declined in size, and is now 8 in. wide, yielding a small quantity of tin. The cross-cut driving north in the 40 has been driven 4½ ft., ground being the same as last reported; the tribute ground is looking more favourable.—J. RICHARDS ; F. GUNDRY : April 18.

PERRAN WHEAL GEORGE.—We have cut the shaft plat, and sunk about 2 feet below the 20 fm. level.—H. DAVIES : April 14.

PRINCE ALBERT CONSOLS.—Our operations are more particularly confined to cutting the plat, which I hope we shall complete soon. The dam does not answer all our expectations yet, the pressure of water being so great that a portion goes through it, but I hope to remedy it in a few days.—H. DAVIES : April 14.

RHOSYDD SLATE.—The men were paid in full course on the 7th inst. The last fortnight has been very favourable for quarry work, and all has gone on regularly at Rhosydd. The roofing up has reached 32 yds., and will, we think, be completed by the end of the ensuing week. The several other bargains have gone on uncovering, and the works daily assume a more developed and quarry-like appearance, it being quite impossible that anything can be more satisfactory than the present state of the quarry.—JOHN HARPER ; THOMAS JONES : April 14.

RHEIDOL UNITED (NEAR DEVIL'S BRIDGE).—In Rhubriggus level the lode keeps getting better, and at the shaft in Nantyglass level the lode improves fast, and both our stopes are in good ground. I hope to have good samplings of lead and blende at the end of this month.—W. GOES : April 19.

RORRINGTON.—Harrison's lode, in the deep adit level driving east, is 2 ft. wide, containing sulphate of barytes and flookan. The south lode, in the middle level driving east, is 1½ ft. wide, composed of gossan, and yielding stones of lead ore. The middle level, driving east on the branch, is 4 ft. wide, nearly all sulphate of barytes. The stopes west, in the back of the shallow level west, on the south lode, will yield about 3 cwt. of lead ore per fathom. The stopes, east on the same lode, will yield 4 cwt. of lead ore per fathom.—J. TAYLOR ; J. MEREDITH : April 18.

ROUND HILL.—The 30 fathom level, driving north, has in the past week been driven over a good bunch of lead ore, about 6 ft. long, which did not go more than 4 ft. up the end, producing from 1 to 1½ ton per fathom, this appears to be on the top of a good bunch of ore, and in order to prove this we intend to sink a fathom or two in the bottom of the level. We have cleared about 8 fms. north of the winze in the 20, the level is still broken down and filled with stuff. The pitch in the back of the 30, just behind the end, will yield 1½ ton of lead ore per fathom; the pitch to the south of this will produce 10 cwt. of lead ore per fathom. The pitches in the other parts of the mine are much the same as when last reported. The cross-cut, driving east towards the Coppice lode, at the Coppice shaft, is progressing favourably. We are sorry to say that the air being so bad in the 30 we have been obliged to put an air-machine there, for the purpose of giving the men good air, and, in consequence, we have not made the progress we could wish in this level.—A. ROWSON : April 18.

SILVER BROOK.—The lode in the engine-shaft is just the same as when last reported, being 4 ft. wide, 2 ft. of which is rich and zinc ore. The shaftmen are now engaged in cutting ground for beavers and cisterns, and making the necessary arrangements in the shaft preparatory to dropping our sinking lift. When finished, we shall again resume the sinking of the engine-shaft with all possible dispatch. In the 33 end, south of engine-shaft, the lode is 6 ft. wide, of a very promising appearance, composed of soft white spar and carbonate of lime, with a quantity of zinc ore, and spotted throughout with lead. The men engaged stopping in the back of the 22, south of engine-shaft, have removed to stop in the back of the 33, south of Tomkins' winze; the lode here is 4 ft. wide, 2 ft. of which is good saving work for zinc ore. The lode in the stope in the back of this level, south of engine-shaft, is 3 ft. wide, producing fair quantities of lead and zinc ores—a very promising lode. The lode is the same as when last reported on in the back of Treverethan's rise. There are 50 tons of zinc by the side of the canal waiting shipment, and sold at 21. 10s. per ton; likewise 15 tons of lead ore waiting shipment.—W. HOSKING : April 17.

SORTRIDGE AND BEDFORD.—In costerning north we have not discovered any more lodes. The engine-shaft has been sunk to the depth of 6 fms. 3 ft. below the 20. The lode in the 20 is improved since last week; it is now worth about 4 cwt. of tin per fathom. I have put one man to costern back by the River Towy, to cut the underlie lode which we met with on Tuesday, and about 2 ft. below the surface we have met with some very good stones of yellow and black copper ore; the lode is 4 ft. big. I shall be able to say more about it in a few days, when I will let you know how it is looking. Our machinery continues to work well.—T. THREWELL : April 18.

SORTRIDGE CONSOLS.—The eastern engine-shaft is now down to the 40 fathom level, and shall commence to put in the soot to take down the lode this afternoon. The eastern end in the 30 has a little improved, the horse of killas is going smaller; I believe, in driving 6 or 8 feet more, the horse will be all gone; the western end in the same level is a little improved. We have drawn this morning, from the end, some very good stones of ore; there is still gossan in the end, and of the finest description. The pitches in the back of the 20 are much the same as last reported. We set a winze to sink on tribute in the bottom of the 30 on Saturday last, at 2s. in 17. We have begun to cut beaver holes for the cistern, &c., in our new shaft for the plunger-lift; and the walls of the new engine-house will be up by next Saturday, the 21st inst., and shall commence to cover in immediately. Our little engine is still working splendidly; we have had but one hindrance since we put it to work, of the leakage of the boiler. We have the bob, cylinder, and other things on the mine, and expect the boiler here to-day. All other things are progressing to our satisfaction.—JAMES MERTHILL : April 19.

SOUTH BOG.—The shaft is sunk below the 35 fathom level, 9 fms. 1 ft. 6 in. The ground is a little more favourable for sinking, but the water is very troublesome. The ground in the 35 fm. end, driving north, is a little easier for driving, with a little water coming from the end. The stopes under the 23 fathom level, are worth 10. per fathom for lead ore. The lode in the 10½ fathom level end, driving south, is 1½ ft. wide, good saving work for lead ore. The lode being small and unproductive, Powell's adit is not so favourable for sinking; the lode being small and unproductive. The lode in the end of Powell's adit, driving east, is 2 ft. wide, composed of flookan, killas, and decomposed elvan, not quite so favourable for driving. The rise in the back of the north and south lodes, in the same level, is worth 12. per fm. for lead ore. The lode is the same as when last reported on in the back of Treverethan's rise. There are 50 tons of zinc by the side of the canal waiting shipment, and sold at 21. 10s. per ton; likewise 15 tons of lead ore waiting shipment.—W. MOASIS : April 19.

SOUTH CARN BREA.—I have re-set the flat-rod shaft to sink below the 20 fm. level, by nine men, at 25. per fm.; the part of the lode sinking on is composed of gossan and spar, mixed throughout with green carbonate and grey copper ore.—T. GLANVILLE : April 14.

SOUTH CRENVER.—The sumpmen have been busily engaged repairing the engine-shaft in the 61 fm. level, preparatory to sinking. We have to enlarge the end of the present week. The ground in the 84 cross-cut, driving south, is rather hard; it will be about 13 fms. to drive to get under the engine-shaft. The lode in the 74 fm. east is 2½ ft. wide, and will yield 3 tons of copper ore per fm., worth from 4 to 5. per ton. The lode in the 64 east is 2½ ft. wide, and will turn out 4 tons per fathom of rich quality yellow copper ore. In consequence of the air not being good, the stopes have run from their bargain in the back of the 64, and I hope we shall have other men who will work it; the lode is very good, and industrious men could break a large quantity of excellent ore from this back. The lode in the 54 east is 5 ft. wide, and will produce 5 tons of ore per fm., which is improving in quality. We have commenced sinking Gore's shaft below the 64, and the little already done induces us to think that in estimating 3 tons per fm. is not overstating its value. The winze sinking below the 44 is composed of mundic and good stones of ore. No alteration in the tribute pitches, taking them generally.—T. RICHARDS : April 16.

SOUTH PROVIDENCE.—The lode in the 25 fm. level is worth 12. per fm. The backs over ditto are a little improved, worth 20. per fm. The lode in the 13 fm. level is worth 12. per fm. The stopes in the back of this level are worth 90. per fm. The stopes in the bottom of this level are worth 12. per fm. We have cut the engine-shaft in the valley, about 200 fms. west of engine-shaft; it is 8 feet wide, composed of gossan, peat, prian, and a small portion of tin. It can only be seen 10 feet below surface in this place, but this being in the valley, it is quite as deep as the present engine-shaft; and, from its appearance, I have no hesitation in saying it will be found exceedingly productive.—E. WILLIAMS : April 18.

SOUTH TAMAR CONSOLS.—The lode in the engine-shaft is 6 ft. wide, yielding good stones of lead. In the 136 end south, the lode has not been taken down since last report. In the 124 end south the lode is 3 ft. wide, worth for lead 15 cwt. per fm. The 112 end south has not been driven during the past month; in the 112 end north the lode is 6 ft. wide, worth 15 cwt. of lead per fm. In the 90 end south the lode is 3½ ft. wide, worth for lead 11 cwt. per fm. No alteration to notice in any of the upper levels since last report. In the 100 end, north of Smith's shaft, the lode is 4 ft. wide, worth 9 cwt. per fm. The 90 end has been communicated to Manking's shaft. The stopes throughout the mine are looking well. We shall sample on Saturday next 110 tons of lead ore.—G. E. TREMAYNE : April 17.

SOUTH WHEAL ROBERT (Boscombe).—According to request, I have put the men to costern the south part of the sett, where we have discovered a large lode, but cannot ascertain its underlie yet, as we are not to sufficient depth to prove it. In the 20 fm. level we have opened a large lode, from 10 to 12 feet wide, composed of gossan and spar throughout.—**South Lode.**—The ground in the 42 fathom level east is 4 ft. wide, north to south, as there are several other lodes passing through the lode. The sett is situated in a mineralised neighbourhood, near Horrington, in the parish of Walkington, in the county of Devon, about four miles from Tavistock, and is bounded on the north-east by West Wheal George, which has returned upwards of 7000. worth of copper ore at the depth of 40 fms., North Wheal Robert, Old Wheal Robert, Sortridge Consols, &c., to the north-west, and on the west by Old Furse Hill Wood Mine. From the present appearance of the ancient workings of the latter mine,

it must have returned the largest amount of tin of any mine in Devon; the same lodes are also crossing South Wheal Robert sett, in a beautiful locality; the stratum is composed of a light killas, or clay-slate, which is considered by all practical miners as productive of copper ore; bounded on the northern side of the sett, by a large elvan-course. Wherever lodes have been discovered where the killas and elvan form a junction (and veins have been discovered) they all prove productive. This sett is upwards of 300 fms. east and west on the bearings of the lodes, and about the same distance from north to south. The sett has been inspected by Capt. M. Francis, and he considers it to be one of the most promising tracts of mineral ground in Devon.—J. POMROY : April 17.

ST. AUSTELL CONSOLS.—In the 45 fathom level we have cut the nickel branch, but cannot say much about it until we have driven a few fathoms north, to cut the shoot of ore; the ground has been very hard, or we should have cut the shoot of ore before this. The branch we have been taking down in the sink under the 35 fathom level west the lode in the winze will produce from 6 to 7 cwt. of lead per fm. In the 10 fm. level the lode is running south of Michel's shaft; the pitch in the back of this level will yield 12 cwt. of ore per fm. The pitch at the winze, in the bottom of the east and west lode, is rather poor, but producing good stones of lead ore. At Rose Hill shaft, we are sinking a winze below the 40 fm. level to prove the lode, and clearing out the east and west lode upon the string lode, ready for driving eastward. We are progressing with our dressing department, and expect to be able to sample 20 tons at our next monthly sale.—W. RAMSDEN : April 19.

TALEIGH.—I beg to inform you our proceedings for the past week: eight men stopping on No. 8 lode, east of No. 13, upon tribute, producing good ore; 14 men will be on tribute next week. There are 12 men now at work, 11 boys, and 2 girls. Ore dressed, 8 tons of lead, and 4 tons of copper; we shall dress more in the following weeks. If the ore will last, as it appears now, the quantity (30 tons) will be ready by the 8th of May.—W. WILLIAMS : April 14.

TAMAR MARIA.—We have driven 2 fathoms east on the course of the lode; the lode taken down, which is about 1 foot wide, very similar in character to that I have before reported. We shall, I think, soon get through the cross-course, still to the east, after which I am of opinion that the lode will change for the better. The ground is still good for driving.—J. HODGE : April 17.

TAMAR SILVER-LEAD.—The mine underground, I am happy to say, is looking very well, particularly in the 190 fm. level, where the lode is yielding 1 ton of rich ore per fm. In other places there is no particular alteration to notice. We have a great part of the pitwork at the North Mine to surface, and I believe we shall get it all up in the course of the ensuing week. We have commenced repairing the machinery at the South Mine, and the men are now engaged in putting in a new boiler for the large pumping-engine.—J. WOLFERTON : April 14.

TAVY CONSOLS.—The 36 end, driving east, is at present poor. The stops in the 36 fm. level is producing some good work for copper ore. Gilbert's pitch, in the back of the 36, is not looking so well as it has been for some days past, but I expect an improvement in time. In James' pitch, 50 fathoms east of shaft, we have a very good lode; of this pitch I will give more particulars next week. The other tribute pitches are without alteration. Up to this time, we have not cut any lode in the cross-cut driving south of the 36; the ground is becoming more easy for driving, and water is issuing from the end.—W. GOES : April 19.

TEES HEAD CONSOLS.—We are now getting near a vein in the driving of the new adit level. The sill, which is that of the slatey haze, is much broken up, and dips north more rapidly than before; but this is not the only favourable indication. I am happy to say that we have just met with the same nice dolomitic ore in the fore-head, which looks very favourable indeed. I hope to be able to state more particulars in my next.—T. DICKINSON : April 14.

TEES SIDE.—The weather continues favourable, and we shall have the wheel at Providence shaft in full operation on the 15th inst., after which we shall use all our endeavours to get the wheel at Metal Band to work as soon as possible. We have commenced washing at Metal Band, and hope to be able to prosecute the working of the mine vigorously.—A. WATSON : April 17.

TINCROFT.—Highbrow lode, in Martin's east shaft, sinking below the 152 fm. level, is 4½ ft. wide, worth about 180. per fm. In the 152 fm. level, driving east of the same shaft, the lode is 2½ ft. wide, worth 100. per fm. In the winze sinking below the 142 fm. level, the lode is 3½ ft. wide, worth for tin and copper 100. per fm. The stopes in the bottom of the 132 fm. level, are worth 80. per fm. In the 110 fm. level, driving west of the engine-shaft, the lode is large, producing a little copper, Chapple's lode, in the 142 fm. level, driving west of Downton shaft, is 2½ ft. wide, worth for tin 70. per fm. In the 130 fm. level, driving west of the same shaft, the lode is 2 feet wide, producing low work for tin. In the 120 fm. level, driving west of the 110 fm. level, west of the same shaft, are worth for tin and copper about 120. per fm. North Tincroft lode, in the 142 fm. level, driving east of new engine-shaft, is 4 ft. wide, worth 50. per fm. In the west end of the same level the lode is 3½ ft. wide, producing saving work for tin. In the 130, driving east, the lode is 2 ft. wide, and very poor. The stopes in the back of this level is worth 150. per fm. In the 120 fm. level, driving west, the lode is 3 ft. wide, worth 60. per fm. In the 110 fm. level, driving west of the same shaft, the lode is poor. Dunkin's lode, at the engine-shaft, sinking below the 120 fm. level, is 2 feet wide, worth for copper 90. per fm. In the 120 fm. level, driving west of the same shaft, the lode is 3 feet wide, producing low work for tin. We have all the lode now laid open in the bottom of the shaft, which is about 5 feet wide, the south part of which is composed of flookan, prian, and carbonate of iron, interspersed with silver-lead, and on the under wall the leader of silver-lead continues about 1½ inch thick, as last reported, which I have assayed for lead and silver, the produce of which is 12 in 20 for lead, and 110 ozs. of silver to the ton; the north part of our copper lode is producing good stones of copper ore, similar to what I sent you on Saturday last, but none of that lode has been taken down since. The tribute department is looking well; we have broken in the last two days from 8 to 10 cwt. of rich silver ore, I can not say its value, as it is all in its rough state, but I may venture to say worth hundreds of pounds per ton. We have drawn to surface to-day about 1 ton of best quality, and from 2 to 3 tons of second ditto.—W. KNOTT : April 18.

TRANNACK CONSOLS.—We are now getting near a vein in the driving of the new adit level. The sill, which is that of the slatey haze, is much broken up, and dips north more rapidly than before; but this is not the only favourable indication. I am happy to say that we have just met with the same nice dolomitic ore in the fore-head, which looks very favourable indeed. I hope to be able to state more particulars in my next.—T. DICKINSON : April 14.

TRINITY MINES.—The ground in the western cross-cut is harder than usual, the men have not, therefore, made that progress expected—ground driven during the month, measured 2 fms. 1 ft. 6 in.; set to-day at 10 ft. per fm. We have set the end on the eastern cross-course to six men and three boys, at 3s. 7d. 6d. per fathom; this cross-course continues regular and favourable for working; in the past month the men have driven 7 fms. 2 ft. 2 in. Having carefully assayed the flookan and gossans of the Old Barrow at Devonshire shaft, on the south lode, we find it is mixed with tin, and will produce about 1 cwt. of black tin to the 100 sacks, or 10 tons, which prove the old mine (when last worked) to be not only productive of copper but of tin also.—JAMES BENNETT : April 17.

TREGONEBRI AND FAT-WORK.—The manager in his report, dated 17th inst., states—We have cleared the adit west, where the north and south lodes meet: there must have been a fine course of tin at the junction of these two productive lodes. The gunnals at this place is 10 ft. wide, and there is no doubt right under this place, at the bottom of the mine, we have found a good course of tin. We have 12 fms. to clear this adit to the flat-rod shaft. The flat-rod shaft is cleared and secured within 5 fms. of the adit level; by the end of this month the adit will be cleared to the above shaft, and the shaft to the adit. We shall finish sinking the bob-bit at the flat-rod shaft this week. The masons will commence building next week. The bob-bit at Jenkins' engine-shaft is partly cleared out. Our engine is working well, and our prospects are excellent. It is likely I shall stop here until to-morrow evening; if so, I will write you again to-morrow.

TRELOWETH.—The engine-shaft is sunk 5 f

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, April 20, 1855.

COPPER.	£. s. d.	BRASS (sheets) p. lb.	1 old.
Sheathing and bolts .. p. lb.	0 1 2	Wire	11 1/2 d.
Bottoms	0 1 3		
Old (Exchange)	0 1 0 1/2	SPELTER. Per Ton.	
Best selected	0 1 0 0	Foreign	23 0 0 23 5 0
Brugh cake	126 0 0	To arrive	23 10 0 -
Tile	126 0 0		
South American	—	SINC.	
IRON.	per Ton.		
*Bars, Welsh, in London. 8 0 0		TIN.	
*Ditto, to arrive	7 10 0 - 7 15 0	English, blocks	111 0 0 -
*Wall rods	8 0 0 -	Ditto, Bars (in barrels)	112 0 0 -
? Staffs, in London. 8 10 0 -		Ditto, Refined	114 0 0 -
*Bars ditto	8 0 0 - 9 0 0		
*Hoops ditto	9 0 0 - 10 0 0		
*Sheets, single	8 15 0 - 21 5 0		
Pig, No. 1, in Wales	4 15 0 - 5 5 0		
Refined metal, ditto	—		
Bars, common, ditto	8 10 0 - 7 0 0		
Ditto, railway, ditto	8 5 0 - 6 10 0		
ditto, Swedish, in Lond. 14 0 0 - 15 10 0			
Pig, No. 1, in Clyde	3 0 6 - 3 1 6		
LEAD.			
English Pig	22 5 0 - 22 10 0		
Ditto sheet	23 0 0 - 23 10 0		
Ditto red lead	23 10 0 -		
Ditto white	27 10 0 - 28 0 0		
Ditto patent shot	25 10 0 -		
Spanish, in bond	21 0 0 - 22 0 0		
American	none.		
FOREIGN STEEL.			
Swedish, in kgs to arrive. 18 10 0 -			
Ditto, in faggots	22 0 0 -		
English, Spring	22 0 0 - 24 0 0		
QUICKSILVER.	p. lb.	1s 10d - 1s 11d	
* In Liverpool, 5s. per ton less.			
? At the works, 1s. to 1s. 6d. per box less.			
In Liverpool, 10s. per ton less.			
+ In Liverpool, 10s. per ton less.			

REMARKS.—The metal market continues in a quiet state, and, judging from the limited transactions that have taken place, it does not yet appear that prices have offered sufficient inducement to buyers to purchase beyond present requirements. The shipments of iron are large, but almost entirely rails. The exports of copper have also increased.

COPPER has been in very good demand for home consumption. The Government has purchased freely. Upwards of 100 tons have been shipped to Calcutta on account of the East India Company: 1291 tons of ore were sold at Swansea on the 17th inst.; the quantity announced for sale on the 8th proximo is 991 tons.

IRON.—The transactions in rails have been more extensive than for a long time past. English bars can now be bought out of stock in London at 10s. per ton lower than a month back; business is more easily effected for early deliveries here at 7s. 10s. or 6s. 10s. per ton at the works for second quality. First quality Staffordshire bars, hoops, and sheets have, in about one month, been reduced 20s. per ton, second quality about 10s. per ton, while Scotch-pigs have not varied more than 2s. to 3s. per ton; the market for the most part has been firm, but the demand limited; mixed numbers are now quoted 5s. 6d. cash, g.m.b., f.o.b. in the Clyde.

LEAD.—There has been more enquiry for this metal, and prices have improved—in a month so much as 10s. to 20s. per ton,—and sellers are now firm at our quotation.

SPELTER.—The market has been dull, with slight fluctuations. The stock here on the 1st inst. was 2886 tons, since which no addition has been made. As this return is exceedingly small, compared with former ones about this period, last April being 6187 tons, it is probable the market will keep steady, and perhaps an advance established. Zinc has fallen 20s. per ton.

TIN.—On the 2d inst. an unexpected reduction took place in the price of English qualities, a difference of 3s. per ton on blocks and bars, and 4s. per ton on refined; at these prices smelters remain firm. Banca is in good request; there is very little to be met with on the spot. Good quality of Straits is much wanted.

TIN-PLATES.—Have been more freely dealt in.

STEEL.—Swedish kgs to arrive is quoted at 18s. 10s.; our market is quite clear of equal assortments, 140 kgs of 2 in. are all the stocks now in London. Faggot steel has been sold at 22s. per ton.

QUICKSILVER.—For large parcels 1s. 10d. is quoted; small lots 1s. 11d. per lb.

GLASGOW, APRIL 19.—Since our last report prices of pig-iron have fluctuated between 59s. and 60s., and a moderate business has been transacted. The shipments continue fair, although much less than at the same period last year. The deliveries for shipment and consumption are, undoubtedly, for the time, in excess of the production, but there is an absence of fresh purchases for shipment. To-day prices were slightly better; 59s. 6d. paid for mixed numbers, warrants. No. 1, Gartsherric, 65s.; No. 1, g.m.b., 61s.; No. 3, g.m.b., 59s. 6d. Shipments for the week ending April 14:—Foreign, 5274 tons; coastwise, 7124 tons = 12,398 tons. In the corresponding week of 1854 they were—Foreign, 4284 tons; coastwise, 12,979 tons = 17,263 tons.

LIVERPOOL, APRIL 19.—Since the reduction in prices of iron announced at the quarterly meeting, orders have been given out more freely, and greater firmness has been shown, without any further change in price. The shipments of Scotch Pigs continue to show a falling off as compared with last year, and the price has yielded 6d. per ton this week. Tin-Plates are in rather better demand, at former rates. In Lead and Copper there is no change. The quotations for Tin-Plates are—Charcoal IC, Liverpool, 1s. 11s. per box; Coke IC, 1s. 5s. 6d. For Copper bolt and sheathing, Liverpool, 1s. 2d. per lb. Merchant Bar-Iron, Wales, 6s. 15s. per ton; ditto, Liverpool, 7s. 6d.

PARIS, APRIL 18.—Our Metal Market is still very calm, and prices remain unchanged. The Société des Houillères du Comptoir held a meeting on the 4th inst., when a dividend for the first eight months of 1854 was declared, at the rate of 35 francs per share, which will be payable after the 1st May. The Usine de Blache St. Vaast (Pas-de-Calais) are advertising for gold, silver-lead, lead, and copper ores. The Stolberg and Westphalian Lead and Zinc Mining and Smelting Company have convened an extraordinary general meeting for the 11th May, for the purpose of considering what steps shall be taken concerning the finances of the society. At St. Dié, there has been nothing doing in pig-iron, and other descriptions barely maintain former rates.

The *Journal des Chemins de Fer* states that the Great Central (of France) Railway obtained a decree on the 7th inst. for the definitive concession of several lines of railway, which will be of great benefit to the districts through which they pass. In noticing one source of wealth, that of mining, the following accounts will give some idea of the resources of the 12 departments interested—viz.: Puy-de-Dôme, Cantal, Corrèze, Dordogne, Lot, Tarn-et-Garonne, Tarn, Aveyron, Haute-Loire, Creuse, and Loire, which belongs to another basin, which latter alone had, according to the official return to the end of 1852, 70 coal concessions, 5 concessions for iron, 11 for lead and its sulphates. The 11 other departments had 57 coal concessions for coal, 11 for bitumen, 2 for pyritic and aluminous earths, 10 for iron, 7 for manganese, 3 for lead and its sulphates, 10 for argiferous lead, 2 for copper, 4 for copper and other metals, 2 for lead and other metals, 1 for gold, and 1 for arsenic; whilst for the whole of France the figures are only—For coal, 44s.; bitumen, 39; pyritic and aluminous earths, 10; iron, 177; manganese, 20; lead and its sulphates, 17; argiferous lead, 14; copper, 19; copper and other metals, 12; lead and other metals, 13; gold and silver, 23; and arsenic, 2. Since this report was published, there have been 158 new petitions for mining concessions, of which 12 are for the railway, and the 12 departments mentioned above, and there appears little doubt that the railway will bring forward many others, by furnishing a means of transit for the mining products to the various markets.

With regard to the Belgian Metal Markets, the *Journal des Charbonnages* states that there is no change in prices, but that they are somewhat firmer. Goods pigs cannot be obtained at present under 12 fr., and we ought to add that there is a good demand for all descriptions. The coal trade continues brisk, and the underground operations are now so organised as to be in a position to speedily execute all orders which are in arrear. The production this year will reach 3,800,000 tons, and the number of colliers employed is 3000 more than last year. An explosion of fire-damp took place in the Réunion Colliery, at Mont-sur-Marchienne, by which four men have been badly injured, although it is hoped not past recovery. The King, by Royal decree of the 16th inst., offers a prize of 2000 fr. (50l.) for the most complete and satisfactory answer to the following question—the answer to be placed at the disposal of the Academy of Sciences, Literature, and Fine Arts:—“Indicate a complete system of rational and practical means of extending the working of collieries to the depth of 1000 metres (567 fms.) at least, without sensibly altering the modes of operation at present in use in Belgium.” At Liège, business is calm, and no transactions of importance have taken place. Prices continue the same.

MINES.—We have for a long time past had to refer almost weekly to the continued depreciation in the market value of speculative mines, particularly such as were making calls, and it would appear that even dividend mines, sometimes also without adequate cause, are subject to the same depressing influences. A few months since Alfred Consols shares were 26l. per 51 20th, and they have now fallen to 10l., or a decline of more than 80,000l., the principal reason being, as we stated last week, the small dividend, in consequence of the expenditure for new machinery, and a falling off in the value of the bottom levels. Altogether, however, the Alfred district is not in such favour as it was a short time ago. In other shares there has been nothing very exciting, or very new, during the week. The purser of Wheal Kitty (Lelant) has issued a circular to the shareholders, informing them that after June next he hopes to make profits of not less

than 2000l. a year, and that he considers the shares (250ths) worth 50l. each, the present market value being about 15l. to 20l. At the Herodscombe meeting, the report was considered so favourable that it was resolved to go on with the mine, and forfeit all shares upon which calls were due. Wheal Cliffrords have been enquired after, at 200l. to 225l. Gonmenas in demand at 14l.; Ordrack Moor, 13l. 10s.; Wheal Wrey, 5l. 2s. 6d. to 5l. 5s. At Wheal Messer, an improvement of some importance has taken place in the bottom level going east, where the lode is now in easy ground, and productive. North Bassets have been largely dealt in, at 19l. 5s. to 19l. 15s.; Sortridge Consols, 2l. 17s. 6d. to 3l. At North Robert, a level has been commenced at 30 fms. from surface, to drive from the trial shaft towards Sortridge, and something good may be looked for before long. Hington Down, 11l. Marke Valley shares are sought after, in consequence of a good discovery in a cross-cut in the 80 fathom level, driving towards the Rosedown part of the sett; the lode discovered and now driving on west is 22 ft. wide, worth 30l. per fathom; as there are 600 fms. of new ground in this part of the mine, the discovery is looked upon as of great importance; at the annual meeting of the shareholders, held on the 12th inst., the accounts showed a balance of assets over liabilities of 2234l. 12s. 3d. North Crofty, 12l.; Great Devon, 365l. to 370l.; South Caradon, 320l.; South Frances, 360l. to 365l.; Rosewarne, 150l. to 160l. West Frances shares are enquired after, at 15l. to 20l.; the position of this mine, adjoining West Basset and South Frances, is such as to lead to great expectations before long; for many months the shares have been very flat. Great Sortridge Consols, 12s. 6d. to 15s. In Vale of Towy a good business has been done, and the price has advanced to 17s. 19s.

In the Bullion Market.—Mexican dollars, 4s. 10d. per oz. Bar silver, 6s. 0d. per oz. standard. Bar silver holding 5 grs. of gold, 5s. 0d. per oz. standard. Bar gold, 77s. 9d. per oz. standard. Columbian dubbloons, 74s. per oz. Fine cake silver, 5s. 5d. per oz.

At Botallack Mine meeting, on Tuesday, the accounts showed—Balance from last account, 1884l. 15s. 7d.; copper ores sold (less 1-18th dues), 3001l. 13s. 1d.; interest, 10s. 2d.; ore sold, 6384l. 17s. 8d. = 8840l. 9s. 1d.; Mine cost, April, 1854, 2139l. 5s. 10d.; secretary's salary, 36s. 1s. 4d.; dividends on shares, 11s.; sundries, 35s. 5s. 3d.; leaving balance in favour of mine, 1474l. 4s. 11d.

A general statement of assets over liabilities, including the cost-sheet for March, shows an available balance of 2234l. 12s. 3d.

The directors' report stated that, notwithstanding the large outlay rendered necessary by the extensive workings now in progress, the available assets to the end of March last had not been sensibly diminished. Capt. James Seccombe reported that a cross-cut had been driven north from the present end of the 80 fm. level west, and a lode intersected, which was about 5 ft. wide, composed of pebbles, quartz, mica, and copper ore; it would yield 4 tons of good quality ore per fm.

At Great Wheal Vor United Mines meeting, on the 14th inst. (Mr. E. W. Neale in the chair), the manager's report (which will be found in another column) was read. The chairman stated that Wheal Metal had lately nearly repaid the whole outlay, deducting permanent improvements; the sale of tin from that mine had rendered 7210l., and considering the short time it had been worked the mine had done well; and that its production had been constantly increasing must give satisfaction to all.

At the Great Wheal Vor, the engine had worked as satisfactorily as possible; they were beginning to get some returns from that mine, and the workings of the Flows, &c.

At the Holmbush Mining Company meeting yesterday (Mr. Heathorn in the chair), the accounts showed—Balance from last account, 1122l. 18s. 2d.; mine cost, Jan. 1854 to Feb. 1855, 18,247l. 4s. 2d.; W. Watson, pitwork, 205l. 2s. 6d.; interest, discount, London expenses, &c., 339l. 17s. 9d. = 19,919l. 7s. 2d. = Ores sold, 9711l. 13s. 7d.; calls received, 3148l.; oil liabilities, 201l. 8s. 1d.; leaving balance against adventurers, 1853l. 0s. 1d. Capt. Seccombe's report, detailing the operations for the last three months, was read. It stated that in the 145 west, on the Holmbush lode, they had driven 4 fms. 5 in. in some places producing 1 1/2 ton of ore per fathom. There will be about 12 or 14 fathoms more to drive in this end to intersect the old lead lode, at which point this level will be 15 fathoms below any of the present workings on it. In the cross-cut south, at this level, they have driven 5 fms. 2 ft. 6 in., and intersected a part, if not the whole, of the flap-jack lode; the lode is 3 ft. wide, and contains on the north side of it a leader of rich ore, 5 in. wide, producing from 12 to 14 per cent. of fine copper. Below the 132, both the old and new lead lodes remain untouched, but both of which will be available for working as soon as the 145, on the Holmbush lode, is driven about 12 or 14 fathoms further west to intersect it, from which point of intersection a level can be extended north and south on its course, and great quantities of silver-lead ore most probably raised. All the machinery on the mine is in excellent repair, which, with the additional pitwork that has been put down, is calculated to lift any amount of water that they may reasonably expect to have, either in the deepest levels, or any other part of the mine, without the least hindrance or interruption to its working. The report and accounts were unanimously adopted.

A lengthened discussion ensued, during which it was elicited, that to work the mine in a proper manner an additional capital of from 8000l. to 10,000l. would be required. It also appeared that the arrangement made at the last meeting for annulling the debt, increasing the number of shares, and conducting the mine upon the Cost-book Principle had not been unanimously accepted.

Ultimately, a resolution was passed adjourning the meeting until the 4th of May next, and authorising the directors to have the mine surveyed and reported upon. The proceedings terminated with a vote of thanks to the chairman.

At the Castle St. Helens special meeting, last evening, at the office of Mr. Sterne, Great St. Helens' chambers, a discussion ensued on the best means to be taken to obtain payment of calls, amounting to 80l., said to be due by Mr. Stubbs, when it was arranged that Mr. Barnard and Mr. Sterne should communicate with Mr. Stubbs, and lay the result before the committee. With respect to the claim of Mr. Peter Watson for services as purser (32l. 6s. 9d.), as there appeared little done in the months of Aug., Sept., and Oct., it was resolved to offer Mr. Watson 25l. in discharge, and in case of refusal to defend any action which might be brought. Mr. Sterne then brought forward the question of the general expenses, and dwelt particularly on the cost of secretaryship and purser, in the person of Mr. Freeman. He charged that gentleman with incapacity, and with neglect in keeping the books and the general business of the company, and recommended that the affairs of the mine should be placed in the office of Mr. Peet. Mr. Freeman answered the charges *seriozis*, to the satisfaction of the meeting, with one dissentient. He showed he had only had the books in his possession about six weeks, and had so far been obliged to follow the loose manner they had been kept in at Salvador House; but he had ordered others, and was prepared to keep them in a merchant-like manner in future. The discussion occasionally assumed a somewhat stormy character, owing to the excitability and warmth with which Mr. Sterne expressed himself. The meeting had not terminated when our reporter left at eight o'clock, and we must, therefore, give the result in our next.

At Ivybridge Mine meeting, on Tuesday, a large number of shareholders attended, regardless of distance and expense, anxious to prove the favourable reports of Capts. James and Clemon. The parties seemed highly gratified with the general aspect of the mine, considering it is only 15 months old. The works are in full operation, and they have a file of rich silver-lead ore ready for market. Several of the members of the committee went down into the mine to inspect the late discoveries which have been from time to time reported upon in our Journal. They had the satisfaction of communicating to the meeting that the main features of the discoveries were of a cheering character, and likely soon to prove highly remunerative. The accounts presented were approved and adopted, and a resolution unanimously passed to prosecute the adventure with vigour. A call of 6s. 6d. per share was made. A resolution was also passed, empowering the committee to proceed with the immediate erection of the 30-inch cylinder engine, ordered of Messrs. Nicholls and Williams, of Tavistock, for the purpose of working the old, and sinking the new shaft. The present 24-inch cylinder engine will be used for hauling and crushing only. By this arrangement, the lower levels, which are known to be rich, would soon be cleared, and new ground laid open. The committee of management were unanimously resolved to proceed with the new shafts.

At St. Day United Mines meeting, on the 13th inst., the accounts for Nov. and Dec. showed—Balance from Oct. last, 90

the one adjoining Runcorne's winze will be holed to old workings for its entire length before the expiration of the present month. Our dressing operations are going on favourably, and we anticipate that in another week we shall have completed the dressing of our March ore, when its amount shall be reported."

The Royal Santiago Mining Company have advices, dated Cobre, March 8:

TAYLOR'S SHAFT.—The lode is 7 feet wide, with a bunch of ore in the west part. To the east it is not quite so good, as it is getting rather more vugly. In the 62 fathom level east we have not discovered anything; in the cross-cut south the end is still very wet. In the 62 fm. level south-west we have not discovered anything of the lode; the ground is a little better for driving. In the 56 fm. level east, within the past week we have cut the slide, and placed the men to drive north, in search of the lodes east of the slide. In the 55 fm. level west the lode is not quite so large as last reported. In the 44 fm. level west the lode in the end is exactly the same, and as good, as last reported; in the winze below this level there is no alteration. In the slopes in the bottom of the 44 fm. level east there is no alteration of importance. The slopes in the back of the 35 fm. level east are producing some good ore; it has rather improved since last reported on. We have not yet cut through the lode in 5 fm.; a week more, I think, will do a good deal towards clearing up this shaft to the bottom.

ANGELITA.—There is nothing new to mention; the different stations continue as stated in Captain Tippett's last report. We are forking out the water at Discovery shaft, and hope by the end of the week to see the bottom of this shaft, when we shall commence sinking forthwith.

MARCH 15.—TAYLOR'S SHAFT.—The lode in the engine-shaft is 6 ft. wide; the west part is producing the most copper—altogether it will produce 3½ tons per fm. In the 62 fm. level east, driving south, we have not cut the lode as yet; the ground still continues wet, which induces us to drive a little further, to ascertain if there is any more lode standing to the south. In the 62 fm. level, south of west, no lode as yet; our progress in driving here is slow, owing to the hardness of the ground, but we are doing all that can possibly be done. In the 56 fm. level west end, at this time, the lode is very small, but it appears to me that the main part is still to the north, where it is from 4 to 5 feet wide, composed of copper and muriatic. We have been securing this place with timber, and a few days now will prove which is the principal part of the lode. In the 56 fm. level east end we cut the slide in the beginning of the month, and set the men to drive north. I do not think we shall have far to drive to cut the lode east of the slide, as we have branches of copper and muriatic in the country. In the 44 fm. level west the lode is not quite so large as last reported; it is now about 20 inches wide, and will produce 3 tons of ore per fm. The lode in the winze in the bottom of this level still continues large. In the course of the past week, we have met with a hard piece of ironstone, which has injured the lode for the time; at present it will produce 4 tons per fm. Nothing done for some days past in the stopes in the bottom of the 44 fm. level east, the hands being employed at Discovery shaft. The stopes in the back of the 35 fm. level east continue without alteration. In the 32 fm. level, driving south of west, we have not discovered the lode as yet; I think it is further to the south than was anticipated; the ground is very hard for driving.

ANGELITA.—The lode in the adit level, west of Discovery shaft, is 4 ft. wide, and will produce 1½ tons of ore per fm.; the lode in the winze sinking in the bottom of this level is 3 ft. wide, and will produce 2 tons of ore per fm., and has a kindly appearance; the lode in the back of the adit, west of Discovery shaft, is 3 feet wide, and will produce 3 tons of ore per fm. The lode in the 10 fm. level, west of Discovery shaft, is not quite so large as last reported, but still producing stones of copper ore; the stopes in the back of this level are looking much as usual, and will produce 2½ tons of ore per fm. We have set the 10 fm. level to drive east of Discovery shaft, to get under the winze sinking in the bottom of the adit; the lode is about 2 feet wide, at present poor. I have not been able to see the bottom of Discovery shaft as yet. We have about 8 ft. of water more in the 30 fm. level, which I hope will be forked in a day or two. Our progress has been impeded here a little, having had to repair the casing plank in the shaft, loosing the barrels under water, &c.

MARCH 20.—At Taylor's shaft, nothing has been done in sinking since last report; the water being in, and the men employed cutting hatches for timber, &c. The 62 fm. east and west, are without alteration. In the 56 fm. level east, in the cross-cut north in this level, we have cut strings of ore and muriatic, but nothing of importance as yet; in the 56 fm. level west the lode has rather improved, it will now produce about 2 tons per fm. In the 44 fm. level west the lode is opening again as we go west; it will produce about 3½ tons per fm. The stopes in the back of the 35 fm. level east is as last reported. In the 32 fm. level west cross-cut, south from this level, we have not yet discovered the lode. The lode in the winze below the 44 fm. level west has improved latterly; it will produce about 5 tons of ore per fm.

ANGELITA.—There is no particular alteration in the different stations of this mine since last report, excepting the adit end east, where the lode is larger and more promising for ore; it will at present produce about 2 tons per fm.

La Fortuna Mining Company have advices, dated Linares, April 9:—

"Since my last report the cistern has been fixed at the engine-shaft in the third level,

and we are now engaged in draining below that depth, and in clearing the shaft of the adit, with which it is partially filled. I trust that in a short time we shall reach the fourth level in Canada Innoco. We have cut the plat at Addis's shaft, in the second level, and shall prepare to sink to the third. Taylor's whim-shaft is progressing satisfactorily under the second level. We have cleared through a portion of the second level, between Addis's and O'Shea's shafts, leaving about 35 fms. more to clear and secure. I am expecting daily to hear of the beam of Los Salidos engine having left Seville, so that on its arrival we may immediately proceed to put the engine together. The carpenter and pitmen arrived at the mine on Saturday, all well.—H. THOMAS."

The Marquita Gold Mining Company have received despatches, of which the following is an abstract:—Marmato Mines for the month of Jan. 1855, 480 ozs. of fine gold. Cost, \$11,108; returns, \$12,324. Several of the stamping-mills were not at work, in consequence of requiring repairs, which have diminished the amount of returns. Santa Ana Mines for the months of Jan. and Feb. 1855: Cost, \$12,231. Returns realized, \$14,548; estimated value of ore raised, but not reduced to 220 tons of ore, being only partially at work, \$18,920—\$33,468. Purima Mine for the month of Jan. 1855: cost, \$3994; returns, \$4566.

The Lusitanian Mining Company have advices from Captain Thomas Chegwin, their mining agent at Palhal Mine, Portugal, dated April 7th, of which the following are extracts:—

PALHAL.—The men are getting on very well with the sinking of Taylor's engine-shaft below the 8 fathom level. They have in the last four weeks sunk about 6 feet, and put in a penthouse in the whim-shaft for safety. The lode here is 3½ ft. wide, 1 foot of which is copper ore, worth 2 tons per fm.; the other 2½ ft. is hard quartz.

We have commenced stoning in the back of the 8 fm. level, east and west of Roye's winze.

In the stopes, west of Roye's winze (No. 1), the lode is 2 feet wide, worth 1½ tons per fm.

At the 10 fm. level west, we have driven through a part of the lead or cross lode, and think we have the copper lode to the west of it, but at present it is split into branches, nothing to value, but letting out a little water. The lode in the stopes in the back of Roye's winze, is still producing good black ore. We have again resumed the driving of the adit still is producing some good black ore. The whim-shaft opening upon the ore is in the south-west hollow, near the Polk Company's line, where there is not the least appearance of the vein discoverable at the surface. The Tennessee Mine looks remarkably well in that hollow, known as the western level. The ore at present shipped from that part of the vein is worth 35 to 37 per cent. of copper, and appears to improve as the work is carried down. A large body of ore is accumulating on the floors at the Hancock Mine, and it will be difficult to remove them at present, as nearly all the transient teams have left the road, in consequence of the advanced state of the season, and the unheeded scarcity of forage. As work and the continued mining developments progress, so do the mines improve in richness. Every week brings up something of interest. A person should be often through the mines in order to understand the extent of the developments being made there. I shall make you notes as often as I can at Ducktown. The details of the working of each mine, of course, you get from other sources.—April 20.—The Isabella Mine sent off, in March, notwithstanding the bad roads and scarcity of teams, over 150 tons of ore, and the Polk County and Tennessee probably about the same. This is a hard season of the year to get teams.—C. A. PROCTOR. [We are also informed, that 956 boxes, about 220 tons, have been shipped for Liverpool.]

The Wildberg Great Consolidated Mining Company have advices, dated April 12:—At the West Mine, the lode in the Blumengang sink will produce 11 tons of silver-lead ore, per fathom. No. 2, middle stope, will produce 5 tons per fathom.

Book's lode, driving east from the south cross-cut, will yield 8 tons of silver-lead ore per fathom. At the East Mine, the Weiting winze, sinking below the 20, east of Michael's shaft, will produce 4½ tons of silver-lead ore per fathom. Dean's lode, driving west from Michael's shaft, in the 20, will produce 3 tons of silver-lead ore per fathom. Dean's lode, driving east from the cross-cut, in the 20, towards Michael's shaft, will produce 1 ton of silver-lead ore per fm. The Dornengen winze, sinking below the 10, east of Michael's shaft, will produce from 5½ to 6 tons of silver-lead ore per fathom. The shallow adit from reservoirs to Carter's engine-shaft is progressing favourably, and also the 10, driving south from Carter's engine-shaft. Our surface works during the week have progressed rather slowly, in consequence of the Easter holidays, and the severe rain and snow we have had."

The Clarendon Consolidated Mining Company, we understand, have received favourable advices from Jamaica to the end of March. The lode in the bottom of the shaft continues to improve, and the quality of the ore is unexceptionable; this ore is extracted from a depth of between 20 and 30 fms., and, therefore, can, no more than that from Charing-cross, be designated surface copper, a continuous and well-defined lode having been proved.

The New Granada Company have received, per *La Plata*, 529 ozs. of gold, valued at 1311, being the produce from their mines of Frontino and Bolivia, for the month of Feb. They have not yet received details of the working cost, but this has been estimated at 7161. The general tenor of the advices, which extended to 18th March, continues very satisfactory.

The Fort Bowen Gold and Silver Mining Company have issued an interesting account of their mine, which will be found in our advertising columns. The mines are situated at Fort Bowen, in Veraguas, New Granada, on the River Rebo, which empties itself into the North Atlantic Ocean, about 50 statute miles west of Chagres. The richness of these mines is a matter of historical interest. Mr. M. J. Channing, engineer, of New York, says:—"It is recorded in San-Jago (the capital of Veraguas), that in former times the aneroforous region of the Cauca and Rebo Rivers produced a great deal of gold;" and he adds, from his own inspection of the mine, "The metallic value of the Morgan vein (the principal lode) increased the further we went down." Mr. Richard C. Taylor, the geologist, who has also visited the property, states that he found four or five native miners engaged in digging, washing, and washing the gold of the principal vein, which even under the very inefficient and primitive process employed, was sufficiently abundant to remunerate the parties for their labour. About 400 lbs. weight of this ore, indiscriminately taken, and in which not a particle of gold was visible to the eye, was reduced by Messrs. Platt, of New York, and yielded one grain of pure gold to each pound, being about 90 dollars in value for each ton of ore. Mr. Champion, late manager at the St. John del Rey Company's works, visited the mines, and brought home nine boxes of the ore, which was assayed by Messrs. Johnson and Matthey, and in seven places from the Morgan vein yielded an average of 5 ozs. 16 dwt. 20 grs. to the ton, and the surface ore 1 oz. 7 dwt. 17 grs. of gold to the ton. Mr. Ram. de la Torre, the present manager, says:—"The average value of the ore will increase from 2 to 6 ozs. to the ton. In some parts of the vein, the ore yielded as much as 5, 6, and 8 ozs. to the ton." The present company has sent out a complete set of machinery in duplicate for crushing, stamping, washing, amalgamating, and reducing ore, upon the plan of the St. John del Rey Company's works, with all recent improvements. The machinery is being transplanted from Escribanos to the mines, and by August, it is

calculated, the whole will be at work, and capable of crushing 40 tons per day. In consequence of the large amount expended in machinery, the directors are seeking to raise additional capital, by the issue of debentures, bearing interest at the rate of 15 per cent per annum, and which, it is considered, will be amply secured by the property on the mines.

From California, we learn that a splendid specimen of almost pure gold, worth \$376, had been taken out of a hole in the neighbourhood of Downsville, Siskiyou county. With regard to the new mines at Kern River, extraordinary statements continued to be circulated, but not without being questioned. Those who deny the unparalleled richness of the field, still admit that it will yield to each man from 16 to 24 per day, that its extent is very great, and that there is no want of water.

The Gold Mining Share Market remains neglected, and the only transaction effected yesterday was in Colonial Gold, at ½ dis. The closing price of *Aqua Fria* was ½ to ¾; *Anglo-California*, ½ to ¾; *Carson's Creek*, ½ to ¾; *Great Nugget Vein*, registered, ½ to ¾; *Neuve Monde*, ½ to ¾; *Port Phillip*, ½ to ¾; *Quartz Rock* ½ to ¾; *Waller*, ½ to ¾; and *West Mariposa*, ½ to ¾.

In Miscellaneous Shares, the market has been steady, and prices fully maintained. Crystal Palace shares were firmer, changing hands yesterday at 3½, and the closing price marked at 3½ to 3¾; ditto, Preference, ½ to ¾ prem. Netherlands Land were dealt in at 1½, and Scottish Australian Investment, 1½; Peninsular and Oriental Steam, 6½; Royal Mail Steam, 6½. The closing price of Australian Agricultural was 28 to 30; British American Land, 55 to 60; North British Australian, ½ to 1; South Australian Land, 35 to 37; Van Diemen's Land, 12½ to 13; Berlin Water-Works, 3 to 3½ dis.; Electric Telegraph, 14½ to 15½; Mexican and South American, 6½ to 7; Peel River, 2½ to 3½; Submarine Telegraph, 8½ to 1; ditto, Registered, ½ to ¾. In Joint-Stock Banks, the market was more neglected yesterday than for many weeks past, the only transaction effected was in Australia, at 30; English, Scottish, and Australian Chartered, 1½ and New South Wales, 35½. The closing prices quoted of other securities of this description were Chartered of Asia, ½ to ¾; Chartered Bank of India, Australia, and China, ½ to ¾ dis.; London Chartered Bank of Australia, 20 to 21; ditto, New, ½ to ¾ dis.; Orient Bank Corporation, 39 to 41; Union of Australia, 65 to 68; ditto, New, 7½ to 8½.

The latest foreign arrivals at Swansea include—from Cuba, 535 tons of copper ore; from Coquimbo, 1255 casks of cast copper, and 402 tons of copper regus; from Riva de Coila, 100 tons of copper ore; from Havannah, 545 tons of copper ore; and from Bilbao, 100 tons of copper ore.

Sale of MINING SHARES.—Mr. John Robert Pike submitted for sale by auction, at the Mart, on Tuesday, a number of shares in 47 different mines, embracing some of the best dividend-paying ones in the kingdom, and the parties in attendance included some of the most influential speculators in securities of this description. The prices subjoined are where *bonds fide* purchases were made, as several lots did not obtain a bidder: 1 129th part or share in Trevisay and Barrister, 6½ to 10.

Buller and Bassett, 57½, 10s.; ditto, 62½, 10s. per share; 1 ditto, 62½, 10s. per share; 100 Orringtons, in four lots of 25 each, at 1s. per share.—30 shares in the Necropolis Company, 9½, paid, ½d. in three lots at 7½, 17½, 6d. per share.—10 shares in South Africa, 12½, 6d. per share;—10 Joint-Stock Banks, the market was more neglected yesterday than for many weeks past, the only transaction effected was in Australia, at 30; English, Scottish, and Australian Chartered, 1½ and New South Wales, 35½. The closing prices quoted of other securities of this description were Chartered of Asia, ½ to ¾; Chartered Bank of India, Australia, and China, ½ to ¾ dis.; London Chartered Bank of Australia, 20 to 21; ditto, New, ½ to ¾ dis.; Orient Bank Corporation, 39 to 41; Union of Australia, 65 to 68; ditto, New, 7½ to 8½.

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Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

* A Miner (Gumis Lake).—The general law of master and servant extends to miners, quarrymen, &c. Such general law, however, embraces those cases only in which the relation of master and servant exclusively exists, and excludes both those in which the work is done under a contract for a sum certain, and also those on which the hours of work are left entirely in the discretion of the contracting party. The breach of contract put, would seem to be respecting work contracted to be done at a given price. If so, the breach of such a contract is remediable only in the civil courts, and is not cognizable by those tribunals whose jurisdiction is to remedy the violation of the pure relations of masters and servants. If "A Miner" will state his case more at length, it will receive further consideration. State the nature of the contract, and the breach or breaches thereof.—T. T.

Fire-Clay. (E. Brooke, jun., Fieldhouse).—In order to answer the case correctly, the exact words in the deed, or instrument, should be given. The words "mines and minerals of what nature or kind soever" have been held to include beds of stone. Most likely fire-clay would be held to be within the description to the lords; but, as above stated, the true answer depends upon facts that are not stated in the question.—T. T.

Cinder-Pig. Would "Ironmaster," or any of your correspondents, furnish the name of the firm who are supplying the "cinder-pig," which is represented of such an inferior quality? As we think that, in justice to both makers and consumers, the parties ought to be known—for, as "Ironmaster" says it is trash, and in some cases it is, it is, given.—A CONSUMER: *Haydon Bridge, April 16.*

* N. R. (Pisces).—Although it was required that the shareholders should come forward with the trifling subscription required of them by the directors, these, according to the Deed of Settlement, have no power to forfeit the shares. In fact, they can make no call; the shares being fully paid up, their value can only be computed at the market price.

Port Phillip and St. John del Rey Companies.—Sir: We are informed by your intelligent correspondent, "Justitia," in your last Journal, that the ore of the Port Phillip Company is "184 times more valuable than that of the St. John del Rey." Besides this important information, he has also kindly furnished us with his calculation, and states that "if 300,000t. is the correct value of the St. John del Rey Company, 55,200,000t. will be the value of the Port Phillip, or equal to 552t. each individual share." We thank "Justitia" for this gratuitous intelligence, and beg to ask him whether he is a holder of shares in the Port Phillip Company, and, if so, congratulate him upon the success of his new sledge.—*Iago: April 17.*

GOLD in WALES.—Sir: Can any of your correspondents inform me how many months Mr. Low has been in North Wales, how much gold he has obtained, and whether he has extracted 2000t. yet, *solo silex*, out of Welsh quartz?—INQUIRER: *Birmingham.*

The Ave Maria Company.—Mr. Burge is supposed to be the only remnant of the board of directors of the Ave Maria Company. It is quite possible that that gentleman might have made a bargain with Mr. O'Connor to work the New York gold quartz lode together, and to have sent out steam machinery for that purpose; and after that to have debited the shareholders with the amount of that machinery, and appointed Mr. O'Connor the manager. All this could, no doubt, have been done without the shareholders being the wiser. Whose is now the said machinery, and whose the New York gold quartz lode, we must leave the gentlemen named to explain to the shareholders, as no doubt they will do.

* C. W. (Hoxton).—The company have, on several occasions, been in difficulties. The meeting held on Friday was not public, the shareholders having met solely to elect a director in the place of Mr. Cunningham, deceased. As yet the gerant has rendered no accounts, the Tribunal of Commerce in Paris not having yet given their decision.

Knockatrellane Mining Company.—Sir: Your correspondents would much oblige if they could give any information respecting this company, which was started in 1853, with all the amount paid up. I am induced to make this application through your Journal, as neither directors or clerks take any notice of repeated applications made to them for information; they hold fast the money, and that is all we know here about it.—A CONSTANT READER: *Dublin, April 15.*

Anticipated Profits of Gold Companies—ERRONEOUS CONCLUSIONS.—Sir: A correspondent, signing himself "Justitia," appears to labour under great mistakes, and has from time to time made most extravagant and very erroneous statements, which, if not corrected, will mislead the public. Some time ago it was said that Mr. Dyer was making most exorbitant profits for the company, and that the riches of the refuse and the value of his machines were immense, which I knew was not the case. Last week the same correspondent informs your readers that the ore of the Port Phillip Company contains 73 oz. of gold per ton, whilst the St. John del Rey ore contains only 1/2 oz. of gold per ton, and on this makes a most extravagant estimate of comparisons between the prospects of each company. If such statements be allowed to circulate without correction or qualification, they will cause mischief and recrimination. I beg leave to inform your correspondent that he is wrong. The 1/2 oz. per ton of the ore of the St. John del Rey and the Marmato Companies means the contents of the rough stuff as it comes from the mines, whereas the 73 oz. of gold alluded to, mixed with the tin ore obtained at the ovens in Victoria, means the value of the highly concentrated residue, and not the rough stuff. The Marmato Gold Mines, although only producing about 1/2 oz. per ton in the first process from the rough stuff, produce rich black residue in the final washing, containing upwards of 100 oz. per ton—that is, in a small quantity, resulting from thousands of tons treated. Again, the mines alluded to are real mines, whereas the deposits of Victoria are quite different things, and subject to great variations and many irregularities. I believe many of the causes of complaints against the misrepresentations of companies, &c., have resulted from these irresponsible writers, in connection with speculative brokers, and not the managers themselves. I wish, Sir, you could prevent them.—EVAN HOPKINS: *April 17.*

* B.W. (Portman-square).—The Foreign Vineyards Association has been established about 12 months, and has made very satisfactory progress. The next half-year meeting of shareholders will be held on the 26th instant.

PERPETUAL MOTION.—If "E. G." machine is substantially that of the Edinburgh joiner, "E. G." cannot prevent piracy, and for this reason, that if "E. G." were to sue for an infringement of his patent, the defendant would plead that the Edinburgh joiner's machine was published before the patent of "E. G." or, in other words, that the infringement, if any, was of the Edinburgh joiner's machine, and not "E. G." "E. G." misfortune consists in not having obtained a patent before the publication by the Edinburgh joiner. If "E. G." had done so, the Edinburgh joiner would now be in "E. G." position.

Australian Freehold Gold Company.—Mr. Harding has forwarded a correspondence that has taken place between Mr. Terrell and himself, but as we have already devoted a considerable space to the unfortunate dispute between those parties, and the letters forwarded being of a somewhat personal nature, we cannot find room for their insertion.

WHEAL WERY CONSOLS (NEAR LISKEARD).—Sir: In your Journal of Saturday last, it is stated that two parcels of tin were sold from this mine. This is incorrect; and for fear of its misleading any of our shareholders, I will thank you to correct it in your next, as we sold nothing but the two parcels of lead, which you have published.—PETER CLYNE, JUN.: *April 16.*

Anglo-Californian Gold Mining Company.—Sir: I observe in your Journal of the 14th inst. a remark, that many Anglo-Californian shareholders have not come forward with their subscriptions of 1s. per share, which, "if their own manifest interests had been studied, they surely would have done." I assure you this is quite a mistaken view of the case. It is neither from want of faith in the productiveness of the mine, the integrity of the directors, or the ability of the manager, Sir Henry Hantley, but from absolute want of the means just now. I hold a considerable number of shares, and would certainly double them if I could. Nobody in this part knows more about the company than I have done from its commencement, and can safely say that, since Mr. L. Williams' time, nothing but honourable, straightforward dealing has attended it; though untoward circumstances have hitherto kept back the hoped-for, and now apparently certain, results.—F. S. I speak the sentiments of holders possessing about 5000 shares amongst them, and describe their position.—YORKSHIREMAN: *Wakefield, April 19.*

Cornish Engines.—Sir: Referring to your abstract of Brown's Cornish Engine Reporter, from 1st February to 20th of March last, the average duty of pumping-engines is set down at 70/- per ton, lifted 1 foot high by the consumption of 1 cwt. of coal; whim-engines, 17/-; stamp-engines, 31/2. Perhaps some of your correspondents will be able to inform me if the mode of ascertaining the power is alike in each case, if the expansion is as great in the rotary as in the pumping-engine, and how the difference is to be accounted for?—D. D.: *Newcastle-on-Tyne, April 17.*

Red Dragon Mine.—Sir: In last week's Journal, an error appeared in the report of this company's meeting. Instead of crushing 30 tons per day, it should read 30 tons per week.—N. BRAY: *April 17.*

Australian Freehold Gold Mining Company.—Sir: It was with much pleasure I saw, by last week's Mining Journal, that a spirited gentleman, named Clarke, had filed a bill in Chancery against the directors of this company, and I can assure that gentleman he had the heartiest wishes of every honest shareholder for his success. Some strangely constituted minds may call Mr. Clarke a conspirator, as they have done Mr. Gosselaar, but the general opinion is that he is a sensible, fearless, and honest man, in bringing to light the disreputable proceedings of aristocratic jobbers, and other questionable characters, whose names are unparalleled, presenting a reversion of such dirty proceedings for the future. I am happy to find at last there is a prospect of justice being enforced from the misdirectors of the Australian Freehold bubble and worthy confrere of Lake Bathurst, a quality which they seem to possess not one particle of. I wish Mr. Clarke God-speed.—A. S.: *Brighton, April 17.*

Why Diggers SUCCEED and COMPANIES FAIL?—Sir: I think the reason is evident—viz., because the diggers work where they like, with no other cost but themselves, whereas the gold companies cannot get ground to work on, and have to pay, besides, a large amount of salaries to their agents, in addition to expenses at home.—A. COZONAL: *April 19.*

* G. C. (Kerr).—The theory is not modern that at peculiar atmospheric changes gaseous have been observed to exhale from the earth. Where there are mineral deposits, whether working or unexplored, the gaseous exhalations have been observed, in general, stronger than in other localities. These appearances have been seen by numerous parties, the veracity of whose statements it would be futile to doubt, substantiated as they have been by so many facts.

Australian Cordillera Gold Mine.—Sir: As a holder of 400 shares in this company, purchased at a large premium, may I, through your Journal, call the attention of the directors to the necessity of giving their proprietary some information as to its present state and future prospects. I have waited now two years, and know no more about it than the child unborn, and can obtain no information, except that the committee of management is comprised of men, some of whom have lately gone through the Court of Bankruptcy. I sincerely sympathise with those gentlemen; but I consider it a duty I owe to myself to say that it is necessary for the interests of the company their places should be supplied by others, who can devote more time to its management. My patience is quite exhausted, and I trust that myself and others may not be driven to the disagreeable necessity of seeking justice in law, if withheld by directors, which I shall do as early as possible. I hope I shall not be deemed premature in making this humble request.—A. HARVEY: *Law, and Admiralty of Justice: Brighton, April 17.*

Received—"G. D."—"A Mining Student"—Martin Judge—"Scrutator"—"Allegis" (next week).

MARINE MINES CHARGED TO POORS' RATE.—Sir: Noticing your remarks relative to mines being chargeable to the poor's rate, I beg to say that all, both lessors and lessees, interested in the mines of this country should oppose the bill now before Parliament in every legitimate way possible, and direct petitions against it should be immediately drawn up. Many good reasons might be adduced against it, but the strongest is that the system of miners being a self-supporting body against being chargeable to the poor's rate, by their clause in case of sickness, should be sufficient. They make a liberal allowance while out of work, pay the doctor, and bury the dead. I have managed a mine for six years, and not one shilling has any man or his family received from the poor's rate during that period, nor will the overseers allow anything while a man can draw 7s. per week from his club.—S. M.: *April 19.*

* A Shareholder (Brighton).—The committee of investigation have not published any accounts, and there are no funds in hand. The directors are, it is said, in great poverty; one has gone through the Insolvent Court; another has been declared bankrupt; the contractor has not been able to fulfil a job which he undertook; the secretary, we understand, within the last fortnight has died; the pig-joiner is in England, but another director, who was supposed to be solvent, has for a length of time disappeared—in fact, it would be difficult to find the locus in quo of any part connected with this most fraudulent transaction.

ALLEN MINING ASSOCIATION.—In the event of a protracted continuance of the war, the price of coal will be materially enhanced, as the vessels taking out fuel will have no return cargo. Owing to the blockade of Archangel, supplies of rye-meal, which is requisite for the work-people, will be much dearer. Although it is not anticipated that any call will be made, yet it can scarcely be expected that the directors will be in a position to declare a dividend.

Mr. Evan Hopkins leaves London to inspect some mineral properties in the North of England in the course of next week.

GREAT CAMBRIAN MINE.—Sir: In reply to "A Country Shareholder's" letter, inserted in your Journal of the 14th inst., calling attention to the discrepancy in my report of the above mine, inserted in your Journal of March 17, and Capt. Hogan's statement made at a meeting of shareholders, inserted in your Journal of the 7th inst., I positively assert that Captain Hogan is in error. There is but 1 ton of lead, and not 20 tons, now ready for market. I will now take the opportunity to correct another error of Capt. Hogan's: in his report inserted in your Journal of the 24th March, he says—"No. 6 we may call our champion lode; the shaft has already been sunk 12 fms., and we are now stopping east of shaft, and what is now required to be done is to drive on the course of the lode still east. The deep adit level on this lode, to the westward of the shaft, has been driven 35 fms., and to intersect the lode at the shaft we require to drive on 70 fathoms further, which will give us 30 fathoms of backs for stopping by the time we shall have intersected the shaft; to drive these 70 fms. to intersect the shaft on this lode will require an expenditure on an average of 71 per fms., or, in round figures, 500/-." The entire distance from the entrance of No. 6 level to intersect No. 6 shaft is 75 fms., out of which 35 fms. have been driven, thereby leaving but 40 fms., and not 70 fms., the cost of which will be about 240/-, and not 500. I am glad, for the sake of the mine, "A Country Shareholder" is checking the reports, and trust truthful ones will appear in future.—J. HARRIS: *Bolsover, April 17.*

GREAT CAMBRIAN MINE.—Sir: In answer to "A Country Shareholder," I beg to state that I reported at the meeting that I had 20 tons of blends ready for market, and not lead, as reported in your Journal; the mistake does not lie with me.—P. S. We are working on the gold lode, and have traced it for 7 fms. in the level, and find it visible in almost all the quartz we break, and, indeed, richer every day.—W. HONAN, Agent: *Bolsover, April 19.*

We have particularly to request that subscribers and others, in paying accounts, will send cheques or post-office orders, as postage-stamps cannot be received.

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fact was decisive as to the value of the information which it imparted; and we feel a pleasure in directing attention to this highly important fact, as a strong inducement to the better classes of our mining population to avail themselves of the educational benefits thus afforded by the State, with a view to their own future advancement in life. This announcement, coming from official authority, cannot be too general known amongst the young men in the mining districts, whose intelligence entitles them to aspire to higher positions. Their country tenders them every advantage which knowledge and science can confer, and they have, in the certainty of obtaining either private or public employment—the strongest stimulant to the exercise of personal energy and exertion.

A regular and reasonably cheap supply of coal to the inhabitants of this great metropolis, at a uniform price, is a matter of such importance that every proposition deserves attention which is put forward for the attainment of that object. The price of every article in commerce is generally regulated by the demand; or, in other words, the demand regulates both the price and the supply. In the summer season, when the demand for coal diminishes, the price of coal is proportionably reduced; while, on the other hand, in the winter, when the demand is urgent, and the consumption necessarily increases, the price rises higher and higher, according to the necessities of man, occasioned by the inclemency of season and the severity of weather. It may be, therefore, assumed that in London it is the demand, and not the cost price of the article to the vendor, which regulates the rates at which it is sold to the public. Coal, accordingly, in this city, during the winter of 1854, reached 60s. per ton, and during the winter which has passed exceeded 40s. per ton. If a difference in price be indispensable and unavoidable, it would be far preferable that the price of coal should range higher in the summer than in the winter season; and as it usually happens that larger quantities of coal are raised in collieries during the latter than during the former period, coal can generally be purchased at the pit at a reduced price per ton in winter. There may be contingencies in winter which counterbalance this advantage, such as increased water in the mine, and greater cost of transit, but, striking the balance between the two seasons, as a rule, the cost of the article to the consumer ought to be the same at both seasons.

Our attention has been particularly directed to this matter by a little publication, *A Word to the Wise on the Coal Trade*,* which places that branch of the subject very fairly before the public; and those who require further information are referred to Mr. CHARLES MORLEY PEACOCK, Cinderford, Gloucestershire. Although 60s. per ton in London was, of course, an excessive price, the average for the year would be found to be 34s. 9d. per ton, and the regular price in London, having regard to all seasons and circumstances, may, perhaps, be taken at about 30s. The writer very fairly enquires—1. Whether it is desirable that the price of fuel should be most exorbitant at the season of the year when it is most required? 2. Whether there is any necessity for such a price? and 3. Whether it can be by any and what means, to any and what extent, reduced? The first proposition answers itself; the two latter are answered by the distinct assurance, advisedly pronounced, that the price may be reduced very nearly 50 per cent., and that it will be the fault of the London public if this reduction be not accomplished. It is avowed that to effect this object is an arduous undertaking, but it is felt not to be an impossible one: difficulties and obstacles have been placed in the path already; secret foes and open enemies, the jealousy of individuals, and the opposition of public companies must be expected, but the writer has, he assures us, calculated the chances and counted the cost, and he declares himself prepared to nail his colours to the mast. We heartily wish him a fair trial in his prudent enterprise, and we now come to the means by which he hopes to attain success.

There exists, we are authoritatively informed, within 140 miles of the metropolis, and directly connected with it by a line of railway, an extensive and promising coal field, where thousands of tons of coal are annually raised at a cost in actual wages of 1s. 6d. to 2s. 6d. per ton, and which field being as yet only partially opened and developed, is capable of supplying in addition some 300,000 tons and upwards per annum. This coal is represented as being of good quality for household purposes, and thus 100 tons per day may be placed upon the line—a line without break of gauge, at a distance of 140 miles from London.

The next question which presents itself is, At what price could such a quantity of coal be conveyed to London? An authority, reckoned high on railway matters, has stated that motive or engine power could be furnished by a railway company for the transit of large quantities of coal for long distances at 1d. per ton per mile, and that the shareholders would realise a fair dividend for their capital on such transaction. To move and deliver daily this quantity of coal would require two locomotive engines, each of 100 horse-power; and to convey this coal to London and return with a train of empty trucks, would be a fair day's work. At 1d. per ton per mile these two engines would thus earn 14s. 16s. 8d. per day, or 45,500d. per annum. It is, however, conceived that a railway company would readily contract to furnish two engines, to move the quantity of coal above specified, for the distance we have named, at 50d. each per day. As it would be to the interest of the railway and coal company to work harmoniously together, the coal should be placed at the siding at a given hour every day, with empty trucks at command for a return train, and the amount contracted for the engine should be paid, whether there was a lesser quantity, or even none for delivery. We have thus the proximate cost price, railway carriage included, at which 1000 tons can be delivered in London, varying from 7s. 6d. to 8s. 6d. per day, and this coal may be delivered to the consumers, within a radius of five miles from a central given spot, from 2s. 6d. to 3s. per ton, and in like proportion for greater distances. The cost price, therefore, at which this quantity of coal may be delivered to consumers in London may be taken at 10s. to 12s. per ton, and to accomplish this object the sum of 150,000d. is required. This amount of capital will, it is conceived, purchase the fee-simple of about 50,000,000 tons of coal, subject to a royalty of 2d. per ton, will open the collieries with four shafts, form a branch line to the main railway, purchase 300 trucks, and furnish to the proposed company a sufficient plant to deliver 1000 tons daily to their consumers in London.

This may be termed a purely utilitarian age, and the plan proposed for raising the required capital of 150,000d. is by 300,000 shares, of 10s. each. One reason assigned for adopting this course is, that as 300,000 tons will be annually raised, it will enable the shareholders to become annually entitled to one ton of coal at cost price for each share they severally hold, and thus holders of 20 shares will be entitled annually to 20 tons of coal, at a similar price, and so on in like manner. The desire seems to be to render this project essentially a popular measure, and not purely a speculative concern, in the hope of merely realising private profit, but that the capital should be entirely subscribed by coal consumers to an extent sufficient to secure to themselves on these terms an ample supply of coal.

Assuming the annual consumption of an individual householder in London to be 20 tons, an inducement is thus held out to him to become a proprietor of 20 shares, or a holder of 10s. stock, with the prospect of thereby securing to himself in perpetuity, or, at least, so long as the coal-field remains unexhausted, 20 tons of coal annually, at a cost price of about 12s. 6d. per ton; and, by this arrangement, it is proposed that the shareholders in this company should become coal proprietors and coal masters to the extent of their own individual requirements. It is the declared intention to name this company the LONDON COAL LEAGUE COMPANY, and although the promoters do not think it necessary, at present, to disclose the locality in which the coal field is situated, nor the line of railway by which its produce will be conveyed, we are reminded that, if 300,000 tons can be delivered at this price, so can double the quantity, and it may with ease be progressively increased.

We have laid the design and details of the project fairly before the public; it has the merit of novelty, and, to some extent, of originality; and it is dangerous, in this age of enterprise, to pronounce any scheme, however difficult, impracticable. We have given the data on which the proposal is based, stated the inducements which it puts forward, and we must leave men of business to deal with its details. Assuming, for the present, the project to be feasible, that the proposed company could be formed and set in motion, and could be then managed, points on which we carefully avoid the expression of any opinion, it must be remembered that this metropolis is accustomed to be supplied with coal from the Durham and Northumbrian coal fields of a very high quality, and that an inferior substitute, even at a reduced price, will not be readily accepted. Prudential motives may, perhaps, for a while conceal the site of the intended purchase; but the metropolitan public, before it entertains the proposition, will require to be satisfied as to the value of the promised article.

In thus noticing the proposition, we discharge our public duty—namely,

to apprise the community, both social and commercial, of every project which intelligence, activity, industry or enterprise, can devise for the investment of capital, and for promoting the comforts and welfare of the people.

of the deficiency, the remainder will be sufficiently alive to their own interests to raise the required amount within the extended period allowed for the purpose.

We observe that a bill has been filed in the Court of Chancery, by two of the shareholders in the NEW SOUTH WALES AND INTERNATIONAL STEAM NAVIGATION COMPANY, on behalf of all the shareholders who had paid deposits on their shares, against Mr. LLOYD, and five other defendants, seeking a return of such deposits. The bill charged the defendants with getting up a scheme, whereby the estate called the Kensington Estate, in New South Wales, which was purchased for 2500*l.* by EDWARD CALLAN, in September, 1852, was, with a certain mine called the Ebenezer Coal Mine, made the subject of forming a company under the above title, and the nominal value of 19,000*l.* odd. The bill ran to an enormous length, and stated in detail the formation of the company, and, although the word "fraud" was not mentioned, charged a case of misrepresentation against the defendants, amounting to a fraudulent scheme, whereby the public, the Stock Exchange, and the bankers employed, had been deceived; that complete registration of the company was obtained in like manner; and that certain statements made upon the prospectus issued were unfounded, more particularly with reference to 10,000 shares which were reserved to be sent to New South Wales being ready to be taken up; with respect to the dealing in the market, and obtaining a certificate from the bankers of the company of payment into their hands of 41,000*l.* upon deposits, and the apparent subscription for shares to satisfy the requisitions for registration, when, in fact, no deposit had been paid on such shares.

To this bill, a technical defence was in the first instance set up, in the shape of a demurser for want of equity, which amounts to the defendants insisting that, even admitting all the allegations, as stated, to be true, there had not been disclosed a sufficient case for relief, and that they were not bound even to answer the bill. There was also a demurser for want of parties. The case was fully argued before Vice-Chancellor KINDELSLEY, and the demurrs were sought to be sustained on the ground that JOHN LEONARD, the demurring party, did not become a director until after the prospectus had been issued, that only 230*l.* had been paid afterwards, and that the parties suing had separate and distinct interests; and if there was any remedy, it was at law, there being no application for shares after LEONARD joined the company. The plaintiff's case was that LEONARD was cognisant of the whole scheme, had joined at a time when it was evident that the public would not take any more shares, and had then dealt with the fund, thereby showing that he must have done so knowingly; and, therefore, it could not be that he did so except for the benefit of the directors. If the ground of the demurser as to the individuality of interest could be sustained, these shareholders, 180 in number, could all file separate bills, or bring separate actions.

The VICE-CHANCELLOR adverted to the allegations contained in the bill at some length, and said the question was whether there appeared to be sufficient upon the bill itself to entitle the plaintiffs to any relief at the hearing; for, if so, the demurser must be overruled. His Honour expressed no opinion as to the extent of the relief, but he was of opinion that the plaintiffs might be entitled to some relief, and, therefore, the demurser ought to be overruled. The case was one where gross fraud was charged, and that, by means of that fraud, the two plaintiffs, and the several persons whom they purported to represent, had contributed sums of money to form a joint-stock company, to work mines in Australia. The whole was said to be a gross imposture, and that LEONARD, the demurring party, in April, 1853, becoming a director, did so with the full knowledge of what had taken place, at least at that time, and helped to carry out that fraudulent contrivance. Now, although it was true that he was not one of those who originally made the misrepresentations charged against the defendants, still he continued those misrepresentations, and became an accessory after the fact; and the money for which any of the other defendants were liable, he was also liable to pay. His Honour then referred to the cases which had been cited, overruled the demurrs, and reserved the question of costs.

It will be seen, by our advertising columns, that the AGUA FRIA GOLD MINING COMPANY have only received subscriptions for 7000*l.* towards the sum agreed to be raised at the last general meeting, and that another meeting is accordingly summoned. As the directors have no power to receive any contributions unless they reach at least 10,000*l.*, the shareholders are risking the entire loss of their property by their supineness, and we, therefore, again commend the subject to their earnest attention.

Among the many abortive gold mining schemes, this company, at least,

is under the direction of gentlemen of high standing and position, who are admitted to have discharged their duties with skill and integrity. The financial management, so far as it was under their control, has been strictly economical; full and clear statements of the accounts have been submitted to the meetings at the proper time; abstracts of the reports received, whether favourable or otherwise, have been candidly communicated through our columns, and elsewhere; and the whole of the documents have been open to the inspection of the shareholders at the office. The directors, far from evading enquiry into their transactions, seem to have felt that, as they were honourably conducted, enquiry could only benefit them, and they certainly appear to be justified in their expectations by the result.

The company was established in November, 1851, and it was

not until the end of the following year that the powerful machinery reached

California by the long journey round Cape Horn. It had then to be transported up the country more than 200 miles, an operation, in the peculiarity of circumstances and character of California, of far greater difficulty than the whole previous voyage. During its transit, the old machinery

of the American company on the ground at Gold Hill was employed in

crushing quartz, from which 2440 ozs. of gold were obtained, so as to

demonstrate its existence in sufficient quantities to warrant the erection

of the new machinery on its arrival, when, of course, all production ceased

until its completion in February last year. Since that period the new

mill has been employed at intervals—with the delays and difficulties almost

inseparable from works of great magnitude in a new country—and 4000 ozs.

of gold have been obtained at a profit, according to the estimate of the

engineer, of upwards of 4000*l.* This profit has been absorbed, and a debt

contracted, in the extension of the plant; for it must be remembered that

the erection of the reduction works is far from being the only thing re

quisite to carry out an undertaking of this kind. Shafts were to be sunk,

levels driven, a tramway laid down in the adit, pumping apparatus and

an engine erected to drain the mine, a reservoir to collect the water, a

furnace to calcine the sulphurates, from which great returns are expected,

and even a blast furnace for castings was set up to repair the stamps and

machinery without the delay of sending down to the coast. Through the

talent and untiring exertions of the engineer, Mr. ATTWOOD, all this ap

pears, by the testimony of independent eye-witnesses, to have been ef

fected in the most workmanlike and efficient manner; and it is a peculi

ar and creditable feature of this company, that instead of deferring all pro

duction of gold until the whole scheme of operations was carried out, they

were able to obtain results, so far as their means would admit, simulta

neously with the execution of the various details, and thus, in some me

asure, supplement the insufficiency of capital. The shareholders are now

told that all the details are finished—there is no occasion for sinking to

great depths in a problematic search for the lode, which is actually opened

to an extent sufficient to furnish 50 tons of quartz per day for the next

two years, independent of other supplies—the quartz is found to yield a

value of from \$20 to \$30 per ton in the deep workings, while the whole

expense of raising and reducing it do not exceed from \$10 to \$12 per

ton;—apart from the success of mining operations, the mill might be em

ployed in crushing quartz for American miners in the neighbourhood,

with a profit that, in a year or two at most, would pay off principle and

interest of the sum proposed to be raised,—and now, at the eleventh hour,

apparently within view of success, the 80,000*l.* they have already invested

in the property is to be utterly lost, because some 16 per cent. on the

amount cannot be raised! We will not offer such an insult to the com

pany as to believe it possible.

We are always desirous to advocate all legitimate mining enterprise,

and it would be a heavy blow and great discouragement if the sharehold

ers of the Agua Fria Company were to desert the directors at this jun

ture. The report of the adjourned special meeting of the ANGLO-CALIFORNIA GOLD MINING COMPANY will be found in another column, and although it terminated most satisfactorily, it is to be regretted that the information the directors had to afford was so meagre. It may be remembered that the meeting was adjourned, in order that the shareholders might have the opportunity of subscribing the 1*l.* per share, which was so unanimously voted on the 16th of March; and, at the same time, the directors anticipated they would be in possession of some definite information from Sir H. HUNTER as to the actual results of working. According to the latest advices, some rain had fallen, though it had not been continuous. About 30 tons had been crushed, which, assuming it to be of the same richness as that previously reduced, would return gold to the value of 6*l.* per ton; the cost of reducing this was estimated at 58*l.*, so that on a production of 180*t.* there would be net profit of 12*l.*

On the 16th of March, the proprietary received notice that there was a mortgage on the property, and that unless this was redeemed within a given period the works would be lost to the company. Instead of issuing debentures, or resorting to the expedient of creating fresh shares, which, in the present state of the money market, would have been excessively imprudent, and not likely to be responded to by the public, the directors proposed that the shareholders should contribute 1*l.* per share, this to be returned out of the first proceeds, with a bonus of 25 per cent.; this was unanimously agreed to, and it was anticipated that by this means a sufficient sum of money would have been raised, not only to have cleared off all liabilities, but at the same time afford sufficient capital to have carried on operations to a successful issue.

How have these anticipations been realised? The smaller shareholders have come forward, and about 1100*l.* have been subscribed, while the larger holders have held back in this dilemma. The directors have raised the required sum for the redemption of the property, and taken on their own shoulders the responsibility which should have been divided over the whole body. This is neither just nor equitable; a further sum is still required, and it is not to be imagined, nor is it fair to expect, that the directors should incur further liabilities on their own account, to protect the property of others.

It is to be deplored that no decisive results have come to hand from the local superintendent, but it must be borne in mind that the past season in California has been one of an unusual nature; in fact, there has been a water famine. Not only has mining suffered, but every interest, commercial, monetary, and agricultural, has been more or less affected by the great want of the necessary element. By the last advices the rainy season had set in, and it was hoped that the gold mines would begin to make returns, and probably by this time a considerable amount has been raised. The question for the shareholders now to consider is whether they think it fair and just that the directors should bear all responsibilities, or whether the burthen should be equally divided. Had it not have been for the energy displayed by the direction, it is patent that the proprietary, by their apathy, would have risked the loss of the property; and it is incumbent on all, if they would preserve it and carry it to a successful issue, that the amount required should be forthcoming immediately. The machinery is erected in good working order, the quartz raised in Brown's Valley is acknowledged by all parties to be of more than average quality, and, could a continuous supply of water be obtained, there is no question but that great profits would be derived. At the period when most of the gold mining companies were formed, neither directors or shareholders had any experience in gold quartz mining, or the climate and difficulties to be encountered in California. It was imagined that when a location was obtained, the only thing necessary to be done was to break the gold from the rock, and forward it to England. Several of these companies were fraudulently concocted, but there is no doubt, and time has shown that we are correct, all the accredited companies started with too limited a capital; this has been their great error, and they are now obliged to borrow money. In the instance of this company, the directors have always given information to the public, and by the publication of their accounts, enabled the shareholders to know how the works have been progressing.

We do not presume to dictate to the proprietary, but we opine that it would not be sound policy, when the works are in full operation and likely to make profits, that the shareholders, by their apathy, in not supporting the directors, should allow the company to get into further difficulties, their property to be injured, and the works impeded, when by a small contribution they could place the association on a sound and solid basis.

ON THE PROPERTIES OF IRON:

at once all mystery as to the composition of steel, it is merely a mixture of pure iron and carbon. These two bodies do not unite chemically together by themselves. A series of simple and economical operations has been devised for combining iron with any proportion of carbon by means of oxygen, and then for abstracting the oxygen from this compound by the application of free carbon at a high heat. By regulating the proportions of the materials, any quality of steel may be produced, suitable to all the purposes for which it may be required, from a couch spring to a lance—an intimate and uniform admixture of carbon with iron, and carbon being in the most minute state of division, and near approximation to diamond, constitutes the excellence of steel.

BRIEF SUMMARY.—Section 1, Iron combined with carbon by means of nitrogen.—Section 2, Iron combined with carbon by means of oxygen.—Section 3, Iron in its simple metallic state.—Section 4, Iron amalgamated with diamond dust.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

APRIL 20.—The quarterly meetings of the Iron Trade ended on Saturday last at Dudley, without affording much hope for the future prospects of the trade. Although prices have suffered 12. per ton, there is scarcely any perceptible improvement in the demand for iron. Business is in such a critical state, that it is extremely difficult, in the midst of a variety of conflicting statements, to describe with much accuracy the true position of business. The ironmasters are, however, contracting their operations within the narrowest limits, as the present value of iron, and the cost of the raw material, are such as to leave but little, if any, margin for profit. On the contrary, several makers would rather suspend their works for a period than entail the risk of loss, if it were not for disorganisation and disturbing the men. The pig-iron makers of Yorkshire and Derbyshire have begun to reduce their make. For some time past the Derbyshire pig-iron trade has been slackening, and now we see several furnaces out of blast. The Derbyshire iron ore trade is gradually resuming its former position. The high price of labour compelled the ironmasters to have recourse to the Northamptonshire ore, which soon became in general use, owing to the cost of labour required for getting the native Derbyshire ironstone. Now, the ironmasters are using considerably less Northamptonshire stone than usual, and were it not for the existence of several large contracts, it would be less generally used than at present.

The Coal Trade is dull, and ironmasters complain loudly of the high price which is charged for coal during a period when the iron trade is so thoroughly depressed. The colliers are generally well employed, and from the number of new coal mines which are being opened, there is no doubt that additional employment will be afforded in the course of a short time. The inactivity of trade in general, and the genial change which has taken place in the weather, are not likely to improve the demand for coal, which usually slackens at this period of the year.

The Steel Trade is gradually improving, though but slowly.

During the close of last week, a large number of articles were forwarded from the principal towns in Yorkshire to the Paris Exhibition, and it has been remarked that the number of specimens of fancy metal work by far exceeds the display in most other trades.

The critical nature of affairs at Vienna and before Sebastopol has had the effect of depressing some descriptions of stocks, and the markets have, consequently, fluctuated during the week considerably more than of late. There has been much uncertainty with regard to the effect which a loan would produce in commercial affairs.

There is nothing of importance to report with respect to the lead mining district of Derbyshire this week.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

APRIL 19.—The last of the quarterly meetings of the iron masters was held at the Hotel, Dudley, on Saturday evening last, but with not more favourable results than those which characterised the previous gatherings, of which I apprised you in my last letter. There was a very numerous attendance of the principal masters, presided over by Phillip Williams, Esq., chairman of the body, but the business done was exceedingly limited, and on anything but satisfactory terms. As I anticipated, there was no formal departure from the resolution of the preliminary meeting, but it is to be feared that there is very little security for the maintenance of fixed prices in the present state of the trade, except by the extensive makers, whose means of credit, and holding stock, enables them, in the worst of times, to command their own terms. The chief business transacted on Saturday evening was in pig-iron, and although it is always a risk, in times like the present, to give quotations, the following may be taken as a fair average of the prices:—Best cold Shropshire blast, from 42. 10s. to 42. 15s., and 42. 17s. 6d.; cinder-pigs from Northamptonshire, from 24. 10s. to 24. 15s.; mine pigs, from 32. 7s. 6d. to 32. 12s. 6d. The stocks are being weekly reduced by the blowing-out of furnaces; and if the trade is to be continued at all, prices cannot descend much lower. Ironstone averages about from 15s. to 16s. 6d. per ton; and with coal at its present price, made iron cannot be reduced below the fixed quotation. The demand during the week is said to have improved, and some brisk orders are reported here by the last arrival from America, although I believe the main hope of the trade rests more upon the consumption for our naval and military purposes, and increased orders for some of our own lines of railway, than any foreign market. Amongst the contracts, specifications of which have been forwarded to the principal houses, is one from the Midland Railway Company, for 5000 tons of iron rails, 100,000 crossties sleepers, with a proportionate quantity of chairs, fishing-plates, bolts, nuts, washers, &c. There is also a contract for first and second-class carriages, for the north branches of the Great Western Railway, in anticipation of increased summer traffic. It is satisfactory to know that the wages question is all but satisfactorily settled: nearly all the men have returned to the pits, without further disorder, and the mines are at full work, notwithstanding the great falling off in the demand for the iron-works. The extraordinary means of transit which we now possess, in connection with the extremities of the country, renders the proprietors comparatively independent of local consumption, and efforts are being constantly made to increase our railway and canal accommodation. In connection with this subject may, perhaps, be appropriately noticed here the introduction of a deputation to the meeting of ironmasters at Dudley, on Saturday evening, from the Oxford, Worcester, and Wolverhampton Railway Company, for the purpose of securing the co-operation of the iron and coal masters in resisting the demands of the Great Western Railway Company to lay down broad gauge rails, pursuant to the terms of the Act, but which, it appears, is unnecessary, and certain to be attended with a heavy expense. The deputation consisted of Alderman Lewis, and Messrs. J. Parsons, R. W. Johnson, J. Busby, and M. Sanders, of Worcester. The chairman, having introduced the deputation, expressed his opinion that the subject was one of considerable importance, and of so much interest to the district that he felt it to be his duty to afford the gentlemen who represented the railway company an opportunity of laying their case before the meeting. Mr. Parsons then detailed at length the nature of the application which he and his colleagues had to make to the meeting, observing that it had been clearly ascertained that mixed gauge were most unnecessarily expensive, and seldom answered the purpose for which they were intended. The proposed branch of line with a broad gauge would cost the company about 400,000£; and, if they could dispense with that outlay, and be allowed to use the narrow gauge, they would be enabled to afford sidings and station accommodation, which would be of great service to the district. Mr. Creswell also denounced the use of mixed gauges, and intimated his intention of supporting the application to Parliament, to get rid of the obligation which the Great Western Company appeared desirous of enforcing. Mr. R. W. Johnson also dwelt upon the advantages which must result from the proposed sidings to the large works, and deprecated the introduction of mixed gauges into that district. It was ultimately resolved, on the motion of Mr. Cochrane, that the meeting approved of the bill now before Parliament for relieving the Oxford, Worcester, and Wolverhampton Company from the necessity of such an unnecessary outlay; and they would do all in their power to promote the objects of the parishioners. The chairman remarked that he was still of the opinion which he gave in evidence, in the year 1845, before the Parliamentary Committee, in reference to the subject of the gauges, and that was, that if Lord Dalhousie's report had been acted upon, and the broad-gauge confined to its own locality, millions of money might

have been saved. The narrow-gauge was unquestionably best adapted for that district. It was then agreed that petitions should be forwarded to Parliament in support of the prayer of the company.

The Copper Trade here is in rather a curious state. The demand for several manufacturing purposes has fallen off to a great extent, and yet the copper agents report a great scarcity of the article, and a consequent maintenance of prices. The deficiency in the market is attributable to the falling off in the Russian supply, and the non-arrival of copper from Canada, the Burra Burra Mines, and other places, from which large quantities were expected. There is, however, a new species of demand for the article, of an extraordinary kind—viz., for tubing and sheathing. There are at present 30 vessels being built, of large tonnage, for which an immense quantity of copper is required, and a similar demand exists in France, so that it is with great difficulty the orders in the market can be supplied.

The Tin Trade remains stationary.

Of the Glass Trade, which is one of considerable importance in this district, very unfavourable return is reported. One of the large works in this town is likely to suspend operations altogether, or reduce the men to very short time. Glass is being sold at reduced prices, and the market is altogether exceedingly dull.

The General Hardware Trade of the town is inactive, and in all the fancy branches a corresponding depression exists.

The following patent has passed through Mr. Shaw's office:—

Mr. R. W. Winfield, of Birmingham, has specified his patent for improvements in tubes and rods used in the construction of metallic furniture. This invention consists in treating the iron-rods and tubes used in the construction of metallic furniture in the following manner:—The inventor coats or covers the rods and tubes with zinc, tin, copper, or other metal or alloy, and afterwards passes the tubes and rods through a draw-plate, such as is used for drawing metallic tubes, or he passes them through a collar of any suitable metal or material; the metal or material of which the draw-plate or collar is composed being varied to suit the metal or alloy with which the rods and tubes are coated, a hard draw-plate, or collar, being used with a hard metal or alloy on the coated rods and tubes, and a soft draw-plate, or collar, being used with a soft metal or alloy on the coated rods and tubes. By this drawing process a smoothness is given to the coated rod or tube, which has a better appearance when the rods or tubes are made into furniture, than the rough surface of uncoated iron tubes and rods, or coated rods and tubes, the surface of which has not been smoothed. The surface of the tubes or rods are afterwards polished with rotten stone, or other polishing material, and lacquered, painted, varnished, or japanned.

THE METAL TRADE OF LIVERPOOL.

We have occasionally noticed in our Journal the arrival of cargoes of copper and other ores at the port of Liverpool, but we have not given that attention to the subject which its importance entitles it to, and which we now propose doing. Many of our readers will, no doubt, be surprised at the extent of the annexed list of imports for the quarter ending the 31st of March, extracted from the bill of entry; but besides these imports from foreign countries and our colonies, considerable quantities of copper ore are regularly brought to Liverpool from North Wales, Cumberland, and Ireland. Many people connected with mining pursuits are apt to look upon Cornwall and Swansea as the only markets for copper and silver ores; but such is not the fact, for there is no place where ores are more readily disposed of, either by public ticket or by private contract, than in Liverpool, or at better prices; for in addition to the Swansea smelters who offer for them, there are three or four firms who have works in the immediate neighbourhood, and who are mainly dependant on Liverpool imports for their supply. At the Harrington Dock, there are extensive wharfs for the reception of ores, together with powerful crushing mills, and other appliances, for preparing them for sale; but copper ores sold by private contract to the resident smelters, are frequently sent to their works direct from the importing vessel, by which a considerable saving in charges is effected. Looking at the immense intercourse continually taking place between Liverpool and almost every country in the known world, ores and metals may be shipped to it with the greatest regularity, and at reasonable freights, so that it may be expected to draw to it an increasing proportion of such imports. We may observe, too, that few localities offer greater facilities for smelting; the great coal fields of Wigan and St. Helens' being close at hand, and Liverpool itself constitutes a large market for the sale of the smelted produce. We confidently recommend this subject to all who are interested in the import of ores and metals to this country.

Imports of COPPER ORE, COPPER REFLUXUS, BAR COPPER, and SILVER ORE, into the Port of Liverpool during the quarter ending the 31st March, 1853.

Date.	Ships.	Where from.	Copp. ore.	Bar copper.	Copp. reg.	Silver ore.
Jan. 1	Ann Lawson	West Coast	92	2336 bars.	140	.....
2	Robert	Marseilles	423 pieces.	595 packag.	.....	.....
3	Taurus	Constantinople	595 packag.	.....	.....	.....
4	New World	New York	64	1518 pieces.	.....	.....
5	Melita	Constantinople	.....	.....	.....	.....
6	Calpe	Leghorn	21	.....	.....	.....
7	Sandusky	Savannah	40	.....	.....	.....
8	Arno	Marseilles	630	13 casks.	.....	.....
9	Chilena	Caldera	900 pieces.	4 casks.	.....	.....
10	Balbee	Constantinople	.....	.....	.....	.....
11	Ontario	New York	9	600 bars.	.....	.....
12	Daniel Webster	New York	90	.....	.....	.....
13	Eleanor Dixon	Islay	.....	16 bars.	99 bags.	.....
14	Eleanor Dixon	Islay	.....	639 bars.	140	.....
15	Caroline Tucker	New York	528	183 bars.	.....	.....
16	Caillao	Callao	75	.....	1233 bags.	.....
17	Fernana	West Coast	236	.....	278 tons.	713 bags.
18	Fernana	Caldera	.....	.....	.....	.....
19	Valparaiso	Valparaiso	200	.....	13	.....
20	Mary Winch	Tongoy	25	.....	.....	.....
21	Mary Winch	Iquique	528	3566 bars.	.....	.....
22	Enterprise	Valparaiso	35	403 bars.	4 bags.	.....
23	Norfolk Hero	Sanvans	.....	.....	.....	.....
24	Manuel Monti	Caldera	400	.....	.....	.....
25	Annie Worrall	Tongoy	9	.....	.....	.....
26	Coquette	Sanvans	4	.....	.....	.....
27	Florid	Sanvans	40	.....	.....	.....
28	Parliament	Boston	55	.....	.....	.....
29	Annie Baldwin	Husaco	380	403 bars.	.....	.....
30	Alamy	Sanvans	7	.....	.....	.....
31	Medallion	Sanvans	35	.....	.....	.....
32	Constitution	New York	105	.....	.....	.....
33	Edward Herbert	Caldera	372	.....	.....	.....
34	Great Western	New York	85	.....	.....	.....
35	Roy William	Cape of Good Hope	70	.....	.....	.....
36	Ell Whitney	Sanvans	35	.....	.....	.....
37	Stephen Larabee	Coquimbo	221	625 bars.	125	.....
38	Endeavour	Trondhjem	.....	.....	.....	.....

THE IRON TRADE—SALES OF BAR IRON BY AUCTION.—A novel feature in the supply of merchant iron to the dealers and manufacturers of the metropolis is about being introduced by Messrs. Boydell and Glaser, of the Camden Works, Camden Town, by the establishment of periodical sales, by auction, of Staffordshire bar-iron, manufactured by them at the Anchor Iron-Works, Smethwick. The first sale takes place on the 30th inst. at the Camden Works, and will consist of between 360 and 400 tons, in lots suitable to the requirements of general consumers, engineers, farriers, wheelwrights, ship-builders, blacksmiths, and iron-workers generally. Liberal arrangements will be made as to payment, and every facility given to purchasers as to the removal of their lots, or allowing them to remain on the premises for a reasonable time. In the present somewhat unsettled state of the iron trade and the labour market, and its dull and unprofitable position, as represented at the quarterly meetings of the masters recently held, it is probable these sales may give a stimulus to enterprise; and should the plan be found to succeed, and cause sufficient attraction to lead to its introduction in the iron-producing and manufacturing districts, a new era may arise in the history of this staple commodity of British industry. We think the example could not have been introduced by any one better calculated to give an *ad e locum* to the proceedings. Mr. James Boydell has been for many years connected with the iron trade and manufacture, and was for a considerable period managing partner of the Oak Farm Iron-Works, near Dudley—an establishment long celebrated for the superior description of its productions, and rolled iron in endless devices, for the numerous appliances to agricultural, architectural, and domestic purposes, and for several inventions secured under patent right granted to Mr. Boydell. We shall make a point of attending the sale, and notifying the result.

MONSTER RAILS.—We last week noticed the production of several extraordinary specimens of iron manufacture for the Paris Exhibition: among them the making of a rail at the Treigear Works on the 7th inst.: this, we are informed, was one of the longest, heaviest, and most perfect rails ever made, and what is called a double-headed rail, 85 ft. 3 in. long; total weight, 1902 lbs. As soon as the manager contemplated making this long rail, the workmen volunteered their services without pay, under the superintendence of their excellent mill manager, Mr. Morgan.

MINES AND MINING—No. XI.

BY EVAN HOPKINS, C.E., F.R.S.

Notwithstanding the commercial depression, and the heavy losses which have occurred from ill-conducted and deceptive schemes, under the name of mining, yet, so prolific is our industrial wealth, that there is at this moment a large amount of capital unemployed, and ready to be invested in good mineral properties. It is true, the prudent and reflecting public are getting now more cautious than they were, which is as they ought to be; nevertheless, there is a great desire to invest in mines that are proved to be of sufficient value by responsible and qualified authorities, if obtained on reasonable conditions, and placed under the entire control of practical and responsible managers. It might be supposed that it would be an easy matter to make a very profitable investment in British mines amongst so many—say about 600 (called as such), with numerous others in embryo, more especially when it is stated that dividend mines are the best of any known investments, paying from 15 to 20 per cent per annum. These good dividend-paying mines form but a small proportion in the whole number offered to the public (as explained in Nos. 1, 2, and 3), and they are, generally speaking, well held, and seldom in the market for sale. They are only obtainable by private negotiation, as many of my clients are well aware.

However, it must not be inferred from this that other mines, or mineral properties, cannot be rendered remunerative to English capitalists, and that they must, therefore, seek places for investment in other countries, nor but to effect so desirable an object—viz., to increase the number of dividend mines—we must thoroughly reform the system on which the majority of our mining schemes are got up, the conditions and premiums demanded and the inconsistent and very loose way in which eight-tenths of them are conducted. If this correction be established, and the acting managers strictly prohibited from dealing in shares, directly or indirectly, confidence would soon be restored, mere jobbing mines stopped, and broken and mining agents kept to their respective callings, a large capital would be invested, and many additional mines, and other speculations, made to increase our wealth and prosperity, instead of being a disgrace to our national enterprise, and injury to the community at large.

WATER COMPANIES IN CALIFORNIA.

Throughout the mining region of California, nothing is more indicative of permanent prosperity than the numerous aqueducts from the permanent streams, affording supplies of water in abundance, even during the summer months from the melting of the snow in the mountains, for mining operations, flouring and saw mills, also for the irrigation of the soil. The dry season will soon be provided against by the proposed general distribution of the rivers, in connection with the aqueducts in productive operation, which are now being extended, with the view of giving effect to the new system of placer mining by hydraulic power, which constitutes an average saving of four-fifths of the manual labour employed according to the old method.

The following is a list of the incorporated water companies, which, with the non-incorporated, will comprehend an estimated capital of 3,000,000.

THE MUTUAL PRINCIPLE APPLIED TO BANKING.

The marked success which has attended the progress of the Unity Fire and Unity General Assurance Associations, promoted by Mr. Thomas H. Baylis, on the Mutual System, has induced a number of influential gentlemen interested therein, in connection with Mr. T. H. Baylis, manager of the Unity Institutions, to apply the principle to banking operations, by the establishment of the Unity Joint-Stock Mutual Banking Association, the customers of which will become participants in the bonus. From the prospectus, by Mr. Thomas H. Baylis, the following condition of the six existing joint-stock banks in London is exhibited:

Bank.	Date.	Capital.	Paid up.	Deposits	Share-hold.	No. of Div. Shares.	Div. p. c.
London & Westminster.	1831	£5,000,000	£1,000,000	£7,177,244	1235	50,000	16
London Joint-Stock.	1836	3,000,000	6,161,154	570	60,000	20 1/2	
Union of London.	1839	2,114,500	412,900	7,081,477	824	42,290	15
London and County.	1840	1,500,000	300,000	394,135	660	17,794	12
Comer. of London.	1849	100,000	50,000	1,963,903	318	15,000	10
Royal British Bank.				50,000	121	1,000	6
Total		£12,604,200	£2,767,035	25,505,697	4028	186,084	

The facts exhibited in the above five totals, and in the dividend list, while they bear evidence of the vast responsibility, extensive business connections, and profitable working of these institutions, show that not only does an ample field exist for additional properly established and well regulated joint-stock banks, conducted on sound principles, but that by their establishment considerable benefit will accrue to the public. At present, it will be seen that the small number of 4028 persons, constituting the whole of the shareholders in these six banks, alone enjoy the privileges of participating in the profits of the business transactions; and it becomes a subject worthy of consideration whether a new path cannot be struck out, and another course adopted, in the construction and practical management of banks, which will secure a more effectual identification of interest between the shareholders of a bank and its customers. Among the several joint-stock institutions established during the past few years, on the principle of mutuality, in no one instance has it failed in producing the most satisfactory results; and from this experience has emanated the formation of the institution under notice, promoted under singularly advantageous circumstances. Although entirely distinct in point of capital and liabilities, it commences its career with the assistance of the Unity Fire and Unity General Assurance Associations, two powerful and popular institutions, the united constituencies of which number several thousand shareholders, assuring at the advent of the institution a foundation on a secure basis, previous to any appreciation on the part of the public of the new features propounded.

The capital of the bank will be 1,000,000, in 10,000 shares, of 100, each, with power to increase to 5,000,000, on which shares a deposit will be required of 10% on allotment, and 40% on incorporation, yielding 100,000—a sum which it is considered will be fully sufficient for all the requirements of the bank, the business of which will not be commenced until the whole has been subscribed, and the half paid up. Any further increase to be regulated by the shareholders only. The management of the bank will be conducted by a governor, deputy-governor, and a court of directors, representing the professional, mercantile, and trading interests of the country. Each director must be the holder of 20 shares, and have paid up 1000% of the capital stock as a qualification. The utmost caution will be adopted in the allotment of shares, to secure a numerous and responsible propertied, and a preference given to those most likely to produce business to the bank. After making a due provision for a reserve fund, to be regulated by the shareholders, 50 per cent. of the bonus in each year will be appropriated to the shareholders as a remuneration for the capital advanced, and with a view to acknowledge and reward the services of those who contribute to the profit and success of the bank, 50 per cent. to the customers, to be divided *pro rata*, according to their cash balances—a feature which must create a strong interest with customers, who thus become as much concerned in extending the business of the bank as the shareholders. It is estimated, on well-founded data, that no very distant period this moiety of bonus will exceed the whole of the profits in banks conducted on the old principle—that it will be the means of opening up new business in quarters where banking has never been adopted—have a strong tendency to consolidate and keep together its stanchions, and while advancing its own interests be productive of great public utility.

With respect to the nature of the business to be undertaken, it will comprise all usual banking transactions, and every legitimate means will be adopted to extend such business. Current accounts will be made up half-yearly, and where the balance has at no time been under 300%, interest will be allowed at the rate of 2 per cent., and 1 per cent. if not below 100%. Under this amount no interest will be allowed. The agency of country and foreign banks will be undertaken, whether joint-stock or private; accommodation will be afforded to travellers with respect to circular notes and letters of credit; it will receive all kinds of income for its customers, as annuities, dividends, military, naval, and civil officers' pay; undertake the sale and transfer of stock in the public funds, the safe custody of deeds, &c. That wide field exists for the extension of banking transactions, to meet the vastly increasing mercantile and commercial operations of the metropolis, there is not a doubt, and the introduction of the mutual principle will form an era in such transactions which will probably change the entire system, and place the interests of shareholders and depositors on a more equal footing than at present.

X

Thermo-Electric Currents.—A number of interesting experiments on the construction of thermo-electric batteries have recently been conducted by Mr. T. H. Leighton, the object, to a certain extent, being to test the direction of the electric current in relation to that in which the heat passes. In the first instance a bismuth joint was formed by soldering together two bars of the same metal—72 pairs of plates being thus connected. When gold, silver, platinum, copper, zinc, cadmium, antimony, iron, or steel, were employed, the electric current flowed in an opposite direction to that of the heat. When palladium, lead, and tin were used, the direction of both currents was the same. When two bars, each of a different metal, soldered together by bismuth, were acted on, the results were various. In 28 pairs the direction of the heat was opposed to the electric; in one pair composed of lead and tin, the heat passed electrically through the joint in the same direction; in 31 cases the pairs acted according to their thermo-electric relations, independent of the side joint to which the heat was applied. There were only four cases in which the heat and electricity coursed in the same direction, and in these the peculiarity was attributed to the tendency the bismuth had to alloy with the other metals; but on repeating the experiments by soldering instead of soldering the bismuth between the plates, in the same heat and electric currents travelled in opposite directions. The pieces of bismuth in these experiments were obtained by holding a bar of the metal in the flame of a candle until it ran like drops fell, which were received on a smooth surface as dice, to obtain the requisite thickness; and afterwards cut into small pieces from 1-40th to 1-50th of a grain. The result arrived at was that the source of the thermo-electric current was at the surface of the joint; and that to make a thermo-electric battery for practical purposes a joint joint is generally better than a joint by soldering, in which the electric current is greatly dependent upon the surface of the metals in contact. It is probable that, although experiments on thermo-electricity have yet been productive of no definitely practical results, telegraphic communication may yet be established by the simple agency of a flame of gas.

ELECTRICITY.—At the Royal Institution, on Tuesday, Dr. Tyndall commenced a course of lectures on voltaic electricity. He began by explaining and illustrating the phenomena of frictional electricity, which have a near relation to those of the voltaic pile, and he particularly noticed the accidental discovery, by the convolution of the legs of a frog by an electric spark. Galvani, purposing that discovery with the impression that it confirmed the views he had previously held, led to the further discovery, more closely approaching the nature of animal electricity, that when the legs of a frog are placed in contact with dissimilar metals they are also convulsed. This experiment was shown by Dr. Tyndall, who placed the hind legs of a frog, with part of the vertebral column exposed, on a plate of zinc, and then touched the tongue with a piece of platinum. The instant that contact was made with the zinc the muscles were contracted, and the legs jumped on the floor. The cause of this action was ascribed by Galvani to the electricity in the muscles, and it was thought that an important insight had thus been gained into the secret of animal life. Volta, however, ascribed these convulsions of the limbs to the excitement of electricity in the metals by contact, and by constructing his pile, consisting of alternate plates of zinc and silver, with a moist cloth interposed between them, he succeeded not only in apparently restoring dead animals to life, but in producing some of the phenomena of ordinary electricity. The construction of the voltaic pile was shown by Dr. Tyndall with a series of zinc and copper plates, and wet rags interposed, which was sufficiently powerful to exhibit sparks when the test was made between the wires at each end; and when the voltaic current was made to pass through a small piece, laid upon tin foil, the fish jumped as if alive. The pile was supposed by Volta to be altogether independent of the fluid, which he conceived merely acted as a conductor. Dr. Tyndall said that this theory of the action of the voltaic pile had been proved by Faraday to be erroneous, though it served at the time to afford a simple explanation of the phenomena. The excitement of voltaic electricity by the action of the zinc and platinum with an interposed fluid, was shown in several experiments, and by merely placing a piece of platinum on the tongue and a piece of zinc under it, a galvanometer at some distance was deflected when the metals were brought into contact. The peculiar action of a voltaic current in deflecting a magnetic needle to the right or to the left, according to the direction in which the current passes, which constitutes the principle of the electric telegraph, was explained and illustrated in well-conceived experiments. An apparatus of Wollaston's was also introduced, to show the additional effect by increasing the surface of the zinc and copper plates ex-

posed to the action of diluted acid. A large pair of plates, connected together at the top by a thin wire, was gradually immersed in the fluid, and as the plates became more immersed, the wire grew red hot, and at last glowed with a white heat. The lecture was well attended, and among the audience was Prof. Faraday, who this year, for the first time, has discontinued his spring lectures.

WEEKLY LIST OF NEW PATENTS.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

J. S. Perring: Permanent way.—T. McLow: Screw propellers.—J. Peabody: Motion power by action of the wind.—J. Gedge: Stopping railway trains (a communication).—J. Forritt: Steam-engines.—W. Swain: Furnaces.—T. W. Bunning: Steam-engines.—R. Peyton: Iron gates and fences.

WEEKLY LIST OF PATENTS SEALED.

J. C. Anderson, Bart., Fermany—Locomotive engines. [substances.] W. J. Barsham, Stratford—Machinery or apparatus for crushing mineral and other J. Harris, Brighouse—Bones applied to millstones. T. Prosser, New York—Condensers of steam engines and parts connected therewith. J. D. Sterling, Blackgrave, Clackmannan, N.B.—Manufacture of metallic tubes. W. S. Roberts, Ledererville, Susquehanna, U.S.A.—Coupling railway carriages. W. B. Adams, Adam-street, Adelphi—Construction and application of elastic springs for sustaining loads or moderating concussion in fixed or moving machines or carriages. J. Platt, Oldham—Machinery or apparatus for making bricks. L. Cornides, Trafaig-square, Charing-cross—An improved apparatus for amalgamating the gold and silver contained in pulverized ores. J. Jamieson, Oldham—Steam-engines. J. J. Bouwens, Mechlin—An improved rotary engine. J. A. Brown, Fleet-street—Centrifugal machines, and in driving the same. P. A. le Comte de Fontaine-Moreau, South-street, Finsbury—Coating and colouring metals and alloys of metals. C. Henfrey, Turin—Construction of railway for steep gradients, and in the machinery or apparatus employed therein or connected therewith (A communication). M. A. Samuelson, Scott-street Foundry, Hull—Steam-engines.

HALSEY'S CRUSHING, TRITURATING, AND AMALGAMATING MACHINE.

We have, during the week, made an inspection of a novel arrangement of machinery for the reduction of minerals, particularly gold-bearing rocks, which may daily be seen in operation at Messrs. Gwynne and Co.'s, Essex Wharf, Strand. This machine has been patented by Mr. Halsey, who has had many years' experience in mining, and reduction-works in Mexico, and consists of a peculiar adaptation of the old Chilian mill, combined with the Mexican arraste and other arrangements and improvements for thoroughly triturating, subsequently to pulverisation, the ground rock with the mercury, to secure perfect amalgamation, and to enable grinding, washing, and amalgamating, to be carried on simultaneously. The bed-plate is cast with four concentric rings on its upper surface, forming three annular spaces, about 6 in. deep. In the centre rises a vertical shaft, connected with a cross-head, to the ends of which are attached the rotating crushers, or edge runners, working in the outer space, or circular trough, and forming the Chilian mill feature. In the inner divisions, forming the annular spaces, there are a number of orifices by which the water supplied to the outer trough, carrying with it the crushed mineral, passes from one to the other; and, in these two spaces, attached to the cross-heads by chains, are two flat cast-iron triturators, or friction-plates, having a sliding instead of a rotary motion, like the outer grinders. The modus operandi of this arrangement may be thus described:—The ore, or auriferous mineral, having been previously broken in pieces of suitable size, is fed into the outer trough, or mill, into which water is constantly supplied; and as the material is pulverised it is carried off by the water into the second annular space, in which a charge of mercury has been placed, and by the action of the triturator is pressed into, and mixed up with, the body of the mercury, tending to combine whatever gold may exist in the matrix with it, and form a perfect and liquid amalgam. A charge of mercury is also placed in the inner space, thus constituting a double arraste, and any portion of the precious metal which may pass with the water from the first amalgamating chamber is taken up in the second. The amalgam is afterwards drawn off through tap holes in the bed-plate. This machine is also well adapted for grinding other substances, which, as seems to be, in every respect, well adapted for our auriferous districts; a machine that will reduce the ore to a proper state of fineness, and without loss of mercury extract the gold from any class of ore from which it can be separated by the process of either washing or amalgamating, or by the two combined; while, at the same time, it is very durable, and economical in cost, the price ranging from 150/- to 250/-, according to size.

REDUCTION OF AURIFEROUS MINERALS.—The earlier patented processes of Mr. G. H. Burrell, of Oxford-road, Barnsbury-park, Islington, and of Ranelagh-road, Pimlico, whose notices to the mining public, have frequently appeared in our advertising columns, consist in operating upon auriferous quartz, clays, and other minerals, preparatory to accomplishing the separation of gold and other metals, and in machinery, or apparatus, for effecting such improvements. When the mineral is an indurated quartz, or other substance, hardened by the presence of silica, the particles precipitate it when hot into a caustic alkaline leay, by which the minerals are disintegrated, or altered in structure; after which that portion rich in gold is fit for subsequent treatment. In washing the softer minerals, the water is admitted beneath the bottom of the vessel, while the debris and refuse is carried off by the water. The refuse matter, or tailings, are thoroughly impalpable, as the fines, and are very escape of the mercury or gold appears impossible. This machine, as a whole, is very compact and simple in all its arrangements, requires little power, taking, for the one we saw, 10 feet in diameter, about four horses effectually to operate on from 5 cwt. to 8 cwt., of ore per hour, in proportion to the speed it is to run, and may be constructed to do a much larger quantity, while the wear and tear is insignificant. Without the crushing rollers, it is an economical, expeditious, and efficient amalgamator, to be used for ores crushed by stamps or otherwise. This machine seems to be, in every respect, well adapted for our auriferous districts; a machine that will reduce the ore to a proper state of fineness, and without loss of mercury extract the gold from any class of ore from which it can be separated by the process of either washing or amalgamating, or by the two combined; while, at the same time, it is very durable, and economical in cost, the price ranging from 150/- to 250/-, according to size.

SMELTING COPPER ORES.—The most abundant ores of copper are pyrites, or a mixture of sulphur of iron, sulphur of copper, and earthy matters. The principle of smelting copper depends on iron having a stronger attraction for sulphur and oxygen than copper has. When copper ores are first exposed to heat, a portion of sulphur is driven off, and the metals become partially oxidised. On fusing, the proto-sulphure of iron acts as a flux for the earthy matters, which float on the surface of the denser portion of the fused mass, and are drawn off as slag, with an iron rake. By a repetition of similar operations, the remainder of the iron and sulphur is got rid of, and the copper is left comparatively pure. This mode of operating is liable to several objections; the whole of the sulphur is wasted, a great part of which passing into the atmosphere, occasions much nuisance and damage around the works. The mode of separating the slag by skimming is defective, as copper must either be taken in small quantities, to keep the amalgam in a fluid state, which takes up a great deal of heat, or the amalgam must be taken in large quantities, to keep the amalgam in a fluid state, which takes up a great deal of heat. The machinery consists of an upright cylinder, in which is a vertical spindle, having arms, or fans, attached, rapidly rotating, and which forces the powdered mineral downwards through the gradually diminishing aperture of a vertical tube, into the mercury or the amalgam, as the case may be, that is contained in a reservoir beneath, the material being fed to the machine through a hole in the side of the cylinder. As the mercury takes up the precious metal, the impoverished mineral escapes from a funnel-shaped opening, floats upon the surface, and is carried away in any convenient manner.

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THE MINING JOURNAL.

ANGLO-MEXICAN MINT COMPANY.—Notice is hereby given, that, at the ANNUAL GENERAL MEETING of proprietors, held on the 3d inst., it was resolved:—

That the 1745 shares now held for account of the Reserve Fund be sold, and the proceeds carried to the credit of that fund; and that they be offered exclusively to the proprietors, at the fixed rate of £10 per share, including the dividends now declared of £1 per share payable in June, and £1 per share payable in December next.

Forms of application may be obtained by proprietors at the offices of the company, 5, Broad-street-buildings.—April 7, 1853.

ALFRED GODFREY, Sec.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—At the ADJOURNED GENERAL MEETING of the above company, held the 16th day of April, pursuant to adjournment, at the Freemasons' Tavern, Great Queen-street, Lincoln's Inn-fields,

Mr. GEORGE G. COTTERELL in the chair.

The following resolutions were moved, seconded, and carried unanimously:—

That the thanks of this meeting are due to the directors for the steps they have taken in raising £2000 for redeeming the property of the company; and that the Board be requested to issue a circular to such of the shareholders as have not subscribed their £1, per share, urging them to lose no time in forwarding their contributions to the secretary.

That, inasmuch as expected advice may render further funds unnecessary, the directors, though authorised to receive the contributions referred to in the above resolution, shall be at liberty, at their discretion, to decline receiving them if required.

That this meeting be further adjourned to Friday, the 18th of May next.

That a vote of thanks be given to the chairman, for his able conduct in the chair, and his untiring energy and zealous attention to the interests of the company.

By order, GEORGE F. GOODMAN, Sec.

11, Adam-street, Adelphi, April 16, 1853.

WHEAL UNY.—At a QUARTERLY MEETING of the adventurers, held at 69, Lombard-street, London, on the 17th April, 1853,

P. L. HINDS, Esq., in the chair.

The following resolutions were several moved, seconded, and carried unanimously:

That the statement of accounts, together with Capt. Rowe's report, be received and adopted, and that they be printed and circulated among the adventurers.

That a call of £1 per share, payable in 14 days, be, and the same is hereby declared to be, made upon the adventurers.

That P. L. Hinds, William Munn, and John Spalding, Esqrs., and Dr. Kennedy, be re-appointed the committee of management for the next three months.

That the thanks of the meeting be presented to P. L. Hinds, Esq., for his courteous conduct in the chair this day; and to the committee generally, for the very able and efficient manner in which they have conducted the affairs of the company during the past three months.

JAMES HUTT, Sec.

WEST ROSEWARNE UNITED TIN AND COPPER MINING COMPANY, GWINEAR, CORNWALL.

In 5500 parts, or shares, of £3 each.

Conducted on the "Cost-book PRINCIPLE," by a Committee of Shareholders in London:

BANKERS—London and County Bank, London.

Messrs. Willyams and Co., Miners' Bank, Camborne.

OFFICES, 70, CORNHILL.

These valuable mines are situated in the parish of Gwinear, in the county of Cornwall, immediately contiguous to the western boundary of Camborne, one of the richest mineral districts in the world.

A stratum of munde or carbona, mixed with black and yellow copperore, commences about 10 fms. west of the engine-shaft, dips westerly, crosses the adit, and in the 10 fm. level, about 32 fms. from the shaft, is 6 feet vertical thickness, and 5 fms. wide—it will yield at least 50 tons per month; and when dressed, produce, at the present price, 45, 10s. per ton for copper only, and 10s. per ton for munde, and meet the probable current expenses of the mine, after the engine has been erected. In the 50 fathom, the future, level, the carbona will meet a cross-course, where a valuable deposit of copper ore is believed to exist. Driving east on the engine level, in the 12 fathom level, where the Rosewarne United Mines were found rich in copper, an abundant quantity of the same ore may be confidently relied upon, by the produce of which, the West Rosewarne United Mines will be placed among the rich dividend-paying mines of the district.

There are six shafts in the mines in excellent working condition; the engine-shaft is sunk 29 fms., and two others upwards of 10 fms., below the adit; a footway has been formed from one of the shafts to the adit level; well paved ore-floors have been constructed, and an engine-house and bob-pit are ready for the reception of the machinery. Upwards of £3500 have been expended in these preparatory works, which are beneficially available to the new adventurers.

The mines are divided into 5500 parts, or shares, of £3 each, and will be disposed of free from further calls or contributions to the capital stock.

The accounts of the company will be made up and balanced, and a statement and balance-sheet will be transmitted to the registered shareholders 14 days before every ordinary general meeting; and at each such meeting two auditors will be appointed, one by the committee, the other by the shareholders, to inspect and audit the accounts, and to report thereon for the information and satisfaction of the adventurers.

In submitting this undertaking to the public, the committee desire to state that there are no free shares; and that, as before represented, no further call or contribution will be required upon the shares issued.

Applications for shares to be addressed to the secretary, or to Mr. THOMAS SPARROW, mine agent and sharebroker, at the office of the company, 70, Cornhill, London; or to the purser, Mr. ROBERT SYMONS, mineral surveyor, Truro, Cornwall.

A plan and section of the mines, and the cost-book of the company, may be inspected by incoming shareholders at the office in London, where prospectuses may be obtained.

WEST ROSEWARNE UNITED TIN AND COPPER MINING COMPANY, GWINEAR, CORNWALL.

Conducted on the "Cost-book PRINCIPLE," by a committee of shareholders.

In 5500 parts, or shares, of £3 each.

APPLICATIONS FOR SHARES in this company will be RECEIVED by the secretary, and by Messrs. THOMAS SPARROW and Co., mining agents and sharebrokers, at the office, 70, Cornhill, London, until the 25th day of April inst. On that day the LIST will be FINALLY CLOSED.—April 20, 1853.

SECOND EDITION.—Recently published, in crown 8vo., cloth boards, with tables, pp. 205, price 3s. 6d., by post 4s.

BRITISH MINES CONSIDERED AS A MEANS OF INVESTMENT.—WITH PARTICULARS OF THE PRINCIPAL DIVIDEND AND PROGRESSIVE MINES IN ENGLAND AND WALES.

SECOND EDITION, corrected and revised, with a large addition of valuable information

By J. H. MURCHISON, Esq., F.G.S., &c.

London: M. Nephew, 39, Cornhill. Copies may also be obtained at Mr. Murchison's office, 117, Bishopsgate-street; within at the *Mining Journal* office, 26, Fleet-street, London; and at the office of Mr. W. E. Commins, Tavistock.

REVIEWS ON THE FIRST EDITION.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal*, Dec. 2.

This is a valuable guide to investors in mines.—*Herapath's Journal*, Dec. 2.

A very unpretending but useful little volume, and contains much information, which cannot fail to be interesting to all connected with a most important branch of our national industry.—*Morning Herald*, City Article, Dec. 18.

Any attempt to afford reliable information in the shape of facts must be useful, and tend to make British mines take a better position among the investments of the day.—*Morning Chronicle*, City Article, Nov. 22.

Mr. Murchison has condensed much useful information respecting a field of speculation on which great ignorance prevails; and has here brought together the details most wanted on the legitimate mining undertakings at home. He gives an account, alphabetically arranged, of the principal dividend and progressive mines. We heartily concur in the hope expressed by Mr. Murchison, "that British mines may take their proper position among the investments of the day."—*Glade*, City Article, Dec. 7.

Mr. Murchison has had for some years considerable experience in the management of the business of British mines, and has devoted much attention to mining in this country, and is entitled to be heard with attention when he discourses upon a subject which is of such vast national importance as the mineral wealth we possess. The book will be found extremely valuable as a guide to all who are interested, or about to seek investments in mines; and we have elsewhere availed ourselves of some of the mining curiosities which Mr. Murchison has so skilfully brought together.—*Observer*, Dec. 24.

The author of this work is a gentleman who has for some years past had considerable experience in the management of some of the best of our progressive mines in the south of Devon and east of Cornwall; and under his auspices an immense amount of capital has been legitimately embarked in the employment of mining industry, with every prospect of ultimate success. He is, therefore, well qualified from experience to write on the subject of British mining, and to produce a work which will be exceedingly valuable to any one who desires to adventure in this important branch of our home industry. . . . And comprising all that is necessary to guide a person in a judicious outlay of his capital.—*Plymouth Journal*, Dec. 7.

The author of this little work has evidently devoted considerable attention to the subject on which it treats, and has succeeded in producing a volume replete with information valuable to those interested in mining speculations.—*Bristol Mirror*.

Those who are seeking information on mines and mining operations, with regard to money investment, will find all the instruction and guidance they need in these pages.—*Bristol Chronicle*.

This is a very valuable book, which all who are interested in mining ought to possess. It supplies a very great amount of information, both on the general subject, and on the history of particular mines, especially in Cornwall. It is calculated, we think, to give an impulse to legitimate mining adventures, and to prudent enterprise. . . . We repeat, that Mr. Murchison's volume is a well written and useful book, and we hope and expect it will be extensively sold and read.—*Gloucester Gazette*.

This work gives a very interesting account of British mines, and of their value as means of investment. It treats chiefly of copper and lead mines, and points out their immense value if properly worked.—*Glasgow Examiner*.

A very valuable work to those engaged in mining matters. It contains a great amount of important information, not to be had in an equally clear, condensed, and comprehensive form, in any other publication.—*Morning Advertiser*, City Art., Dec. 20.

The great experience Mr. Murchison has had in the management of British mines is the best guarantee the public can have of the accuracy of the work: which is indispensable to those persons who have any interest in mining.—*Derbyshire Courier*.

This is a clear, succinct, statistical, historical, and geological description of the leading mines in Great Britain, with an especial view to their eligibility as investments. The author has taken particular care to discriminate between those mines which are sound and legitimate, and those which are simply speculative in their character. He has treated the subject with great ability.—*Blackburn Standard*.

MINES, &c.—MANAGERS and PURSERS OF MINES, and others, requiring PLANS, SECTIONS, CIRCULARS, NOTICES OF TRANSACTIONS OF SHARES, RECEIPTS OF TRANSFERS OF SHARES, COMMON RECEIPTS, ORDER BOOKS FOR MINES, or any species of SURVEYING OR LITHOGRAPHIC WORK, will do well to apply to R. SYMONS and SON, Surveyors and Geographers, Quay, Truro.

Starlings of Cornwall—By the Vice-Warden's Court.

FOR SALE, a 24 in. cylinder ENGINE, and boiler about 8 tons, and first piece of rod, 10 in. door-piece, slack seating, &c., at ANNA MARIA CONSOLS MINE, in the parish of Cardinham.

Notice is hereby given, that, pursuant to the Decrees of the Vice-Warden's Court, made in the CONSOLIDATED CAUSES OF—

TREMAYNE AND OTHERS v. CRISPIN;
TREMAYNE AND OTHERS v. SAME;
PRYOR AND ANOTHER v. SAME; and
KEMP AND OTHERS v. DUNSTAN;

and bearing date the 13th and 19th days of February last respectively, a PUBLIC AUCTION will be HELD at the above mine on Thursday, the 26th day of April inst., at Eleven o'clock in the forenoon.—Dated Registrar's Office, April 15, 1853.

NORTHUMBERLAND.

TO ENGINEERS, IRONFOUNDERS, MILLWRIGHTS, AND OTHERS.

M. R. E. CAMPION has received instruction to name Wednesday, the 25th of April inst., as the day for the SALE of the valuable STOCK IN TRADE, at the HARESHAW IRONWORKS, HEXHAM. The STOCK consists of a large quantity of Hareslaw and Ridsdale old metal, of excellent quality, of every description of moulding-boxes; cast and malleable iron, core spindles, of all sizes; cases for making pipes, retorts, and wheels, of various dimensions; several large and small ladies, fitted up in an excellent manner; and a large assortment of tools for foundry purposes. There is also a large quantity of sheet plates, of all sizes, useful patterns and castings for colliery and mining purposes. It also comprises the following valuable and desirable lots:—

1 large travelling crane, 25 ft. span, 82 ft. length of way, fitted up with single and double gear. It is quite new, of first class manufacture, and is capable of lifting 60 tons.

1 large and 6 small jib cranes, all in good working order.

1 large self-acting lathe, 20 in. centre, 16 ft. bed, with screw-cutting motion attached.

1 small self-acting lathe, 7 in. centre, 6 ft. bed, also with screw-cutting motion.

1 splendid self-acting planing machine, which cuts 6 ft. by 2 ft. 9 in.

1 self-acting drilling and boring machine, with table to work vertically and horizontally, with single and double gear.

1 self-acting screwing machine, to screw from 1/8 in. to 1 1/2 in., with plug, taper, and master laps, and the corresponding dies.

1 very powerful self-acting punching and cutting machine.

(The whole of these machines are of recent manufacture, and are fitted up with every appliance, having been constructed by one of the most eminent firms in the kingdom.) There are also a good and strong built 8-horse beam engine, in perfect working condition.

A large self-acting lathe, 20 in. centre, and 25 ft. bed; this is an excellent and useful machine.

A set of castings for a large railway crane, and a complete set of patterns for the same.

2 excellent pipe-testing machines, in good order, with heads, 2 ft. 6 in. and 16 in. in diam.

2 new railway coal wagons, strongly built.

1 good loam mill and blacking mill.

A large number of iron bogies, of various sizes.

Several fluted and plain crushing rollers for mines.

A vast number of iron and wooden patterns, of the most useful kinds.

A large quantity of blacksmith's tools, consisting of several pairs of bellows, vices, anvils, swage anvils, swage hammers, chisels, &c.

Several tons of bar and scrap-iron; and the whole of the office furniture.

This sale offers to ironmasters an excellent opportunity to supply themselves with the best iron ever produced in the North of England, and which can now be obtained. They may also obtain valuable machines and useful patterns, on terms well worthy their attention.

The conditions of the sale will be cash for sums under £40; and approved bills may be given for sums above £40, the purchaser paying interest and stamp. Every facility will be given for the removal of the goods. The sale will commence at Half-past Twelve o'clock; at Two o'clock dinner will be ready.

The whole will be viewed seven days previous to the sale. Catalogues will be ready on the 16th inst., and may be had of Mr. E. PRUDDEAN, printer, Hexham; and of the auctioneer.—Charlton, Bellington; April 5, 1853.

LAMERTON UNITED COPPER MINE, DEVON, WITH THE MACHINERY AND MATERIALS THEREON.

MESSRS. JAMES WHITE AND SON WILL SELL, BY AUCTION, at the Mart, opposite the Bank of England, on Monday, the 30th April, 1853, at Twelve o'clock precisely, in One Lot (pursuant to a resolution of the shareholders), and without reservation, a desirable property, known as the LAMERTON UNITED MINES, situated at Lamerton, Devon, adjoining the celebrated Great Wheal Friendship, together with the MACHINERY and MATERIALS thereon, comprising a 40 ft. WATER-WHEEL; 16 ft. fms. of flat rods; 1 travelling wheel; 1 shaft; 22 pulleys and stands; 5 9 ft. 9 in. pumps; 1 working-barrel; 1 door-piece; 1 new horse-whim, complete; 70 fms. of whim-ropes; 130 ft. of wood launders and stands; 2 tackles and rope; 100 fms. of zinc air-pipe; sundry timber; board, barrows, kibbles, picks, shovels, gads, and other articles, forming the whole of the property on the mine belonging to the adventurers. It is held on lease for a term of 21 years, from March, 1852, at 15/- per month.

THE PORT ROYAL AND ST. ANDREW'S COPPER MINING COMPANY OF JAMAICA.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD in the City of London, on Thursday, the 26th April, at the offices of the company, in the City of London, on the following purposes:—

1. To amend, add to, or repeal, certain of the clauses and provisions of the Deed of Settlement.

2. To reduce the qualification of a director from 500 shares to 100 shares.

IMPORTANT TO LEAD SMELTERS.—The INVENTOR is PREPARED to CONSTRUCT, upon liberal terms, a DOUBLE REVERBERATORY FURNACE, capable of making a SAVING of 50 per cent. FUEL over that of the best constructed furnaces in Europe; at the same time guarantees the general loss in smelting not to exceed 5 per cent.

The inventor, after 20 years' experience, both in England and various parts of the Continent, has discovered the method, in the regular course of smelting, and without any extra cost, of separating antimony from a certain class of silver-lead ore, thereby rendering the lead free of all impurities, and, at the same time, the antimony in a marketable state.—All letters to be addressed to "C. J. H.," Mississ., Journal office, 26, Fleet-street, London. A perfect model is to be seen on application to the inventor.

NO ARCHITECTS, SLATE MERCHANTS, BUILDERS, AND OTHERS.—The DIRECTORS of the MACHNO SLATE AND SLAB COMPANY having completed their arrangements for the REMOVAL of their SHIPPING PORT to CONWAY, for the convenience of vessels unable to lower their masts to pass the tubular bridge, are now PREPARED to RECEIVE ORDERS for their justly celebrated SLABS AND SLATES, from the Ffestiniog vein, which for beauty of colour and durability are unequalled.

The slabs have been largely used in the construction of houses for Australia; and the facility with which they are erected and removed, are well adapted for available huts for men and horses at the proposed camps in England and Ireland.

All applications to be addressed to Mr. T. H. WHEELER, the resident director, at the company's offices, Conway, North Wales.

HALSEY'S PATENT CRUSHER AND AMALGAMATOR.—This machine is NOW IN OPERATION at ESSEX WHARF, ESSEX STREET, STRAND. GOLD ORES carefully TESTED on the following terms, including the use and distillation of mercury:—

Samples not exceeding 5 cwt.	£1 10 0
" 10 cwt.	2 0 0
" 1 ton.	2 15 0
" 3 tons.	3 15 0
" 3 tons.	4 10 0
" 4 tons.	5 0 0

Large quantities by special agreement. Price of the machine complete, £300.

CALIFORNIA GAS COMPANY.—Three per cent. per month.

Capital, £50,000, in £1 shares, deposit 2s. 6d. per share.

The Prospectus and Report may be had from Mr. G. RAYMOND, broker to the company, 6, Bank Chambers, Lombard-street; or at the offices of the company, 1, Adelaide-place, London-bridge.

The price of the gas has been arranged to yield at the rate of 3 per cent. per month.

JOHN GATLIFF, Sec. pro tem.

CALIFORNIA.—HYDRAULIC POWER APPLIED TO GOLD MINING.—A GENERAL ENQUIRY into the subject connected with the distribution of the permanent rivers in California, to facilitate the operations of placer and quartz mining, has been ORGANISED, with the view of affording that description of information which is required by capitalists desirous of investing money in California water companies.—Communications made direct to P. CADZEL, Jun., Mining Agent, and Agent Confidential for the Enquiry, Quartzburg, Mariposa County, California.—Feb. 10, 1855.

HAGGIE BROTHERS, MANUFACTURERS OF IMPROVED PATENT FLAT AND ROUND HEMS AND WIRE ROPEs, of any length.

COLLIERY CHAINS, &c., GATES-HEAD-ON-TYNE. Improved Saw Mills; Timber Merchants; Wire Signal Lines for Railways and Collieries; Lighting Conductors, &c.

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, and Co., Sole Makers to the Lords of the Admiralty.—ROUND and FLAT ROPEs, of every description, suitable for mining operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED UPON AN IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPEs, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

Offices, 117, Fenchurch-street, London.

WIRE ROPE AND SUBMARINE TELEGRAPH WORKS 39, WAPPING, LONDON.—The undersigned respectfully solicit attention to the great REDUCTION in the PRICE of their ROPEs, which they continue to manufacture of the very best material. The only Prize Medal awarded for "Excellent Workmanship" in wire ropes, shown at the Great Exhibition in Hyde Park, was obtained by them.

IMPROVED PATENT WIRE ROPE.—Mr. ANDREW SMITH, the ORIGINAL INVENTOR of WIRE ROPE, LIGHTNING CONDUCTORS, and SUBMARINE TELEGRAPHS, solicits the attention of the public to his IMPROVED PATENT MANUFACTURE, as the best and cheapest, having obtained his sixth patent since 1835.—Office, 69, Princes-street, Leicester-square, London.

HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPEs, for the use of MINES, COLLIERIES, RAILWAYS, &c., one-half the weight of hemp rope, and one-third the cost; one-third the weight of chain, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.

VALVANISED SIGNAL CORDS AND KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 1s. per 100 yards.

PATENT ASPHALTED ROOFING FELTS. Id. per foot. DRY HAIR BOILER FELTS, to SAVE COAL.

PATENT BOILER COMPOUND, for bad water.

FAIRBANK'S WEIGHING MACHINES, of all sizes.

GALVANISED IRON ROOFING AND SPOUTING.

MILNER'S FIRE-PROOF SAFES.

STOCK of MINING and RAILWAY STORES in Liverpool and London:—viz., OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c., and at very low prices.—Address, 2, Basinghall-buildings, Leeds.

SOLE AGENTS for Prof. GLUMMAN'S ELECTRIC SIGNAL from RAILWAY GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES.

N.B. Illustrated price list on application.

MORTON'S PATENT WIRE ROPEs.—HENRY J. MORTON AND CO., GALVANISED IRON ROOFING and SPOUTING WORKS, 2, BASINGHALL BUILDINGS, LEEDS.

IMPROVED PATENT WIRE ROPEs, for MINES, COLLIERIES, RAILWAYS, &c. References to all the large colliery owners in the kingdom. One-half the cost of hemp or chain, more durable, and ONE-THIRD THE WEIGHT OF CHAIN—very important advantages for deep mines.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES, for the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c. The most ACCURATE MACHINES in use, and the cheapest.

MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON and Co., Galvanised Iron works, 2, Basinghall-buildings, Leeds.

Asphalted Roofing Felts, Boiler Felts, Galvanised Iron, &c., in Stock.

CHEAP, LIGHT, AND DURABLE ROOFING, ONE PENNY PER FOOT.—HENRY J. MORTON and CO., 2, BASINGHALL BUILDINGS, LEEDS. PATENT ASPHALTED ROOFING FELTS, for roofing sheds, contractors' cottages, ore-dressing sheds, brick and tile sheds, and all agricultural purposes. The cheapest roofing manufactured. Stocks kept in London, Leeds, and Bristol. DRY HAIR BOILER FELTS, for saving fuel.

H. J. MORTON and CO., 2, Basinghall-buildings, Leeds.

BRICK MAKING MACHINES.

TO CONTRACTORS, BRICK, AND TILE MAKERS, AND EXPORTERS.

CLAYTON'S PATENTS (ATLAS WORKS) FOR AUSTRALIA AND THE COLONIES. CLAYTON'S PATENT BRICK MAKING MACHINES offer a most important and profitable investment.

CLAYTON'S PATENT BRICK MACHINE (of which there are now upwards of 100 in use) is worked by one horse, or by steam and water power, and combines the whole process of pugging the clay and making the bricks at one time.

CLAYTON'S PATENT TILE, PIPE, and HOLLOW BRICK MACHINES, of various sizes and construction.

CLAYTON'S PATENT DIE, for the manufacture of socketing sewerage pipes.

CLAYTON'S PUGGING MILLS, of various sizes and construction, for tile, brick earth, mortar, &c. And every article connected with the brick, tile, and pottery trades.

The above machines may be inspected, and illustrated catalogues obtained, at the Manufactory, Atlas Works, Upper Park-place, Dorset-square, London.

[TESTIMONIAL.]

Hastings, near Manchester, Dec. 2, 1854.—Sir: Several kilns of bricks made by your machines have been burnt, and I have great pleasure in informing you that they are as good as can be desired. They are in all respects superior to hand-made bricks, and command a much better price. Your machines are simple and efficient implements. I have sent you a few bricks for a sample, which I hope you have received.

I remain, your's, very truly, J. RAWSTHORPE.

Mr. Clayton, London.

STEAM SUPERSEDED BY TWO DOUBLE-ACTING FORCE AIR-PUMPS, with a 2 in. CRANK AND FLY-WHEEL.—The speed of a vessel impelled by steam must necessarily be limited, for when its speed is being increased by a favourable wind, the force of the impulses of steam gets weaker, whereas by GOODLET'S AIR-PUMPS, on the vessel being assisted by the wind, the increased speed of the fly-wheel causes the force of the compressed air, not only on the piston and on the buckets of the periphery of fly-wheel, to increase in strength, but also renders more effective the force of the air on the large piston on the exhaust side of the pump. The soundness of the principle of a quick motion increasing the force of the impulses of air, whether the pump be compressing or exhausting, admits of illustration by a pair of common house bellows.

By GOODLET'S SHORT CRANK and FLY-WHEEL a vessel will be urged forward against the strongest head wind with fewer hands at the fly-wheel than required to supply the furnaces of an ordinary steam-vessel with fuel, by which many a valuable life and vessel might be preserved. In this way the element of air is made by a simple contrivance to assist the men at fly-wheel in time of distress.

GOODLET'S PATENT may be applied to an ordinary sailing vessel, giving a speed of 10 miles per hour, for £300 or £400, occupying a space of 12 by 6 ft. on deck.

The power to propel the vessel to be by means of pipes connected to large air-pump, to force air against the water on both sides of the vessel, producing a propelling force in the opposite direction to the discharge of the air.—Terms for the use of patent, apply to GEORGE GOODLET, patentmaster.—Leith, April 16, 1855.

RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS, BIRMINGHAM. BROAD AND NARROW GAUGE COAL and IRONSTONE WAGONS, IN STOCK—FOR SALE OR HIRE.

RAILWAY WHEEL AND AXLE WORKS.—GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS OF EVERY DESCRIPTION OF HAMMERED IRON, TYRES, AXLES, &c.

GRIFFIN AND HENSON, RAILWAY CARRIAGE AND WAGON BUILDERS, SOHO, BIRMINGHAM. MANUFACTURERS OF EVERY DESCRIPTION OF IRONWORK for RAILWAY CARRIAGES and WAGONS.

INGLIS AND CHISHOLM, MANCHESTER, MAKE SMALL STEAM-ENGINES for MINERS, CONTRACTORS, &c.; also, DRILLING, PUNCHING, and SHEARING MACHINES, and OTHER TOOLS, of the best quality, at a reasonable price.—Address, INGLIS and CHISHOLM, Charles-street, Garrow-

MANCHESTER.

MESSRS. ROBERT STEPHENSON AND CO. CONTINUE to CARRY ON THEIR MANUFACTORY at NEWCASTLE-UPON-TYNE. They insert this notice in consequence of an advertisement, which may probably mislead.

MUNTZ'S SOLID BRASS TUBES for LOCOMOTIVE, MARINE, and STATIONARY ENGINES, are CHEAPER and MORE DURABLE than any other kind of brass tubes.—Address, GEO. RICHARDSON, No. 10, Craig's-court, Charing-cross, London.

CLECKHEATON IRONWORKS, YORKSHIRE.—JOHN TAYLOR, MANUFACTURER of ALL KINDS of FORGINGS for LOCOMOTIVE, MARINE, and OTHER ENGINES, HEAVY SHAVING, ARM MOULDS, and ALL OTHER COUNTRY FORGINGS.

TO IRONMASTERS, MERCHANTS, CONTRACTORS, FOUNDERS, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 59, ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES for the PURCHASE and SALE of PIG and MANUFACTURED IRON.

All orders carefully executed, and prompt shipments made.

PRICES OF TIN-PLATE. BRANDED.

First quality Charcoal Parson's IC Pont-ar-Tawe Charcoal. Tin. 30s. per box 29s. per box.

Second quality Charcoal Parson's IC Charcoal. 28s. per box 27s. per box.

Coke Parson's IC Coke. 26s. per box 26s. per box.

Puddled Parson's IC Puddled. 24s. per box 24s. per box.

F.O.b. Swansea, cash payments. 6s. per box advance on each +.

WILLIAM PARSONS, Pont-ar-Tawe, near Swansea, Manufacturer of Tin-plate, Turno-plate, Button-plate, &c.

KENTLEND ALWAYS IN STOCK, or MADE TO BUYERS' OWN SPECIFICATION.—Apply to WILLIAM F. SIM, Sweeting-street, Liverpool.—N.B. Old Kentledge bought.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS of RAILWAY TYRES and AXLES for LOCOMOTIVE ENGINES, CARRIAGE and WAGON WHEELS. From the test to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

NORRIS'S PATENT RAILWAY CHAIR COMPANY beg to draw the attention of railway companies and engineers to NORRIS'S PATENT RAILWAY JOINT CHAIRS. This patent has received the unanimous approbation of some of the most eminent engineers of the day, as the most effective, economical, and perfect joint in use at the present time. The simplicity of its construction is such as will allow of its application to any line of railway, without causing the slightest hindrance to the ordinary traffic during the time that it is being laid down.

The saving in the preservation of the permanent way and rolling stock by the application of Norris's Patent is incalculable; and wherever adopted must very considerably decrease working expenses.

To railway companies, having old and bad roads, the principle is peculiarly advantageous, as its application will not only restore the road to a perfectly safe and serviceable state for many years, but, at the same time, bring into efficient use all the old and broken chairs.

To the railway world in general it is of the greatest value, as it admits of the easiest locomotion, and is most simple and economical in principle.

Every information will be given, and models forwarded for inspection, on application to the manager, at the offices of the company, Wolverhampton.

TO RAILWAY WAGON BUILDERS.—THE COAL-PIT HEATH COMPANY are prepared to receive TENDERS for the CONSTRUCTION and DELIVERY of FIFTY HOPPER COAL WAGONS, to carry 6 tons 10 cwt.—Specifications, and any further information, may be had on application to Mr. H. HEWITT Coal-Pit Heath Collieries, near Bristol, to whom all tenders must be addressed on or before the 12th of May next.

Dated Coal-Pit Heath, near Bristol, April 12, 1855.

RAILWAY TRUCKS.—TO BE LET, on reasonable terms, a QUANTITY of NEW 6 tons RAILWAY TRUCKS.—For particulars, apply to Mr. THOS. LUCAS, Wellington Chambers, Cannon-street, London.

RAILWAY AXLE-BOX COMPANY.—The axle-boxes manufactured under the combined patent of this company perfectly EXCLUDE SAND or GRIT, PREVENT the ESCAPE of GREASE, and thereby secure PERFECT LUBRICATION, DIMINISHED FRICTION, FREEDOM FROM HOT AXLES, and a SAVING of, at least, 75 per cent. in the consumption of grease and the cost of repairs, thus ensuring those important desiderata in railway transit.—SAFETY, ECONOMY, and EFFICIENCY. Terms for licensees, and every information, may be obtained of GEORGE RICHARDSON, Manager.

THE PERMANENT WAY COMPANY beg to call the attention of civil engineers, contractors, and others interested in the construction of railways to the PRESENT LOW PRICE of IRON, by which a SAVING may be effected of nearly £300 per mile, single line, in the ADOPTION of Mr. W. H. BARLOW'S PATENT WROUGHT-IRON PERMANENT WAY, over that of the ordinary road. Every information can be obtained on application to WM. HOWDEN, Sec.

26, Great George-street, Westminster.

MESSRS. Gwynne and CO. are PREPARED to GRANT LICENSES for the REDUCTION of IRON, COPPER, LEAD, TIN, and OTHER ORES, FUSING and REFINING METALS, CEMENTATION of STEEL, &c., by their NEWLY PATENTED PROCESS. Results can be produced in less than half the time at present required, and it is expected eventually in practice it will not exceed one-third, reducing the cost of the best steel to one-half its present price, with a corresponding saving in time and reduction in price in all other metals.

Messrs. Gwynne and Co. are also PREPARED to GRANT LICENSES to all contractors for the use of their NEW and POWERFUL FUELS, superior to all others yet brought before the public, in their increased heating and calorific value, their entire freedom from spontaneous combustion, their density and compactness of form, and in their great economy of first cost, by the improved modes of manufacture. Machinery

THE MINING SHARE LIST JADE

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120 Alfred Consols (copper), Phillack	£3114.10d.	£11 1/2	10 10 1/2	10 10 1/2	£13 5 0	20 4 0—April, 1855.
5000 Altrord Consols (copper), Salop	2	7 1/2	—	—	0 3 0	0 1 6—July, 1854.
5000 Anglesea Coal Company	7	—	—	—	0 10 0	0 2 0—Nov., 1853.
1234 Ballewidden (tin), St. Just	11 1/2	6	—	—	12 5 0	—
5000 Bat Hole, Worthen, Salop	14.175.62	92	9 1/2	—	0 10 0	10 0—April, 1855.
4900 Bedford United (copper), Tavistock	22.62.82	—	—	—	6 17 6	—
5020 Black Craig (lead), Kirkcudbrightshire	5	—	—	—	0 5 0	2 6—July, 1855.
2000 Botalack (tin, copper), St. Just	91 1/2	230	—	—	330 5 0	7 0—April, 1855.
1000 Bryntall, Llanidloes, Montgomeryshire	7	—	—	—	0 5 0	0 3 0—June, 1851.
5000 Callington (lead, copper), Callington	71.178.2	2	—	—	1 8 0	0 4 0—Sept., 1847.
1000 Carn Bras (copper, tin), Illogan	15	85	—	—	229 10 0	2 0—April, 1854.
10000 Castle slate Quarry, Dolwyddan	1	—	—	—	0 1 9	0 9—Aug., 1854.
236 Conford (copper), Gwennap, Cornwall	16	7 1/2	7 7 1/2	—	3 0 0	0 0—June, 1850.
236 Condurrow (copper, tin), Camborne	20	100	—	—	55 0 0	3 0 0—Jan., 1855.
128 Cwmystwyth (lead), Cardiganshire	60	185	—	—	45 0 0	5 0—March, 1855.
1024 Devon Great Consols (copper), Tavistock	1	375	365 375	433 0 0	9 0 0	0 0—March, 1855.
12000 Dhurode (copper), Ireland	1	—	—	—	0 3 0	0 1 8—Nov., 1853.
179 Dolsoath (copper, tin), Camborne	237 1/2	77 1/2	—	—	3 0 0	3 0 0—Feb., 1854.
19000 Drake Walls (tin, copper), Calstock	11.55.	1	—	—	0 5 6	0 1 6—April, 1853.
200 East Darren (lead), Cardiganshire	32	80	—	—	8 0 0	4 0—Nov., 1854.
200 East Pool (tin, copper), Pool, Illogan	24 1/2	100	—	—	223 0 0	2 0 0—April, 1854.
1024 East Wheal Margaret (tin, copper)	56	12	—	—	0 5 0	0 5—Feb., 1854.
13000 Eyan Mining Company, Derbyshire	3 1/2	26	—	—	4 13 4	0 10 0—Dec., 1853.
494 Fowey Consols (copper), Twardreath	40	30	—	—	359 13 0	1 10 0—Aug., 1850.
246 Foxdale, Isle of Man	7.10.64.	25	—	—	41 7 3	1 0 0—April, 1855.
520 Ditto (New Shares of 25s. each)	25	—	25	2 4 0	—	0 16 0—April, 1855.
4448 General Mining Co. for Ireland (cop., lead)	2 1/2	—	—	—	1 0 8	0 3 3—June, 1853.
2000 Gobinan (lead), Cardiganshire, Wales	6	6	14	—	2 0 0	0 0—Sept., 1850.
1024 Gonamona (copper), St. Cleer	13 1/2	14	—	—	0 7 8	0 7—Dec., 1852.
20000 Great Crinnis (copper), St. Austell	1	—	—	—	0 1 0	0 1 0—Sept., 1854.
13750 Great Polgoon (tin), St. Austell	4 1/2	—	—	—	0 10 0	0 4 3—Oct., 1852.
119 Great Work (tin), Germoe	100	200	—	—	181 10 0	5 0—Nov., 1854.
1024 Herodsfoot (lead), near Liskeard	8 1/2	2	—	—	2 12 6	0 7—April, 1854.
6000 Hington Down Consols (copper), Calstock	3 1/2	55	11	11	0 5 6	0 6—March, 1855.
1000 Holmbush (lead, copper), Callington	25	—	—	—	25 0 0	0 5 0—Sept., 1852.
5000 Hollyford (copper), near Tipperry	11	—	—	—	3 5 0	5 0 0—March, 1851.
76 Jamaica (lead), Mold, Flintshire	2.13.13.64.	—	—	—	0 4 0	0 4 0—March, 1854.
2048 Kenneggy (copper), Breage	68.74.	36	—	—	1 15 0	0 5 0—May, 1854.
780 Kirkcudbrightshire (lead), Kirkcudbright	9 1/2	—	—	—	—	—
20000 Lackamore (copper), Tipperary, Ireland	1	—	—	—	0 1 0	0 1 0—July, 1855.
20000 Laxey Mining Company, Isle of Man	100	1000	—	—	50 0 0	0 0—Feb., 1855.
5000 Lewis (tin, copper), St. Erth	31.88.	1	—	—	0 2 9	0 2 0—Aug., 1851.
160 Levant (copper, tin), St. Just	2 1/2	100	—	—	2 0 0	0 0—Feb., 1855.
400 Lisburne (lead), Cardiganshire, Wales	18 1/2	195	—	—	213 15 0	2 10 0—Dec., 1854.
320 Machnoe slate & Slate Company	23	29	—	—	2 10 0	1 5 0—Dec., 1854.
160 Ditto (New Shares)	18 1/2	23 1/2	—	—	1 17 6	0 15 0—Dec., 1854.
6000 Marks Valley (copper), Cardon	41.10.64.	24	—	—	0 2 6	0 2 6—May, 1855.
5000 Mendip Hill (lead), Somerset	3 1/2	3 1/2	—	—	0 17 6	0 7—Dec., 1854.
5000 Merlin (lead), Flint	2 1/2	—	—	—	1 11 0	0 2 6—June, 1855.
20000 Mining Co. of Ireland (copper, lead, coal)	7	16 1/2	16 1/2	—	10 6 6	0 14 0—Jan., 1855.
5000 Nantlle Vaux (slate), Llanllyfni	1	—	—	—	0 3 9	0 1 3—Nov., 1854.
— Ditto	—	—	—	—	—	—
470 Newtonards Mining Company, Co. Down	50	—	—	—	41 0 0	2 0 0—Jan., 1855.
200 North Pool (copper, tin), Pool	22 1/2	65	—	—	324 0 0	2 0 0—Dec., 1854.
140 North Roskar (copper), Camborne	10	100	—	—	249 10 0	4 0 0—Sept., 1853.
20000 North Wheal Bassel (copper, tin), Illogan	20	—	19 1/2	4 1 0	5 0 0—March, 1855.	
6400 Par Consols (copper), St. Blazey	1 1/2	12	—	—	23 6 0	0 10 0—July, 1855.
5000 Peak United (lead), North Derbyshire	7 1/2	8 1/2	—	—	3 0 0	0 10 0—Oct., 1854.
1100 Perran St. George (cop., tin), Perranporth	21 1/2	15	—	—	1 15 0	0 10 0—June, 1851.
248 Phoenix (copper, tin), Linkinhorne	30	300	—	—	50 0 0	0 0—Nov., 1853.
1000 Polberro (tin), St. Agnes (Preferential)	15	—	—	—	6 6 0	1 0 0—Sept., 1854.
560 Providence Mines (tin), Uny Lelant	20 1/2	21	—	—	24 4 0	1 5 0—Feb., 1855.
1948 Rix Hill (tin), Tavistock	3 1/2	—	—	—	0 8 0	0 4 0—Jan., 1855.
256 Rosewarne United (copper, tin), Gwennap	24	160	—	—	3 0 0	0 0—March, 1855.
256 South Caradon (copper), St. Cleer	2 1/2	320	355 0 0	—	8 0 0	0 0—March, 1855.
6000 South Tamar (silver-lead), Beerlake	11.60.60.	6 1/2	—	—	2 5 0	0 2 8—April, 1855.
256 South Tolgus (copper), Redruth, Cornwall	16	95	—	—	69 0 0	4 0 0—May, 1853.
248 South Wheal Frances (copper), Illogan	37 1/2	370	360 365	276 5 0	10 0 0—March, 1855.	
1024 Spearno Consols (tin), St. Just, Cornwall	1 1/2	—	—	—	0 2 6	0 2 6—Dec., 1853.
1024 St. Auhyn and Grylls (copper, tin), Breage	3 1/2	—	—	—	0 17 6	0 7—April, 1852.
9 St. Ives Consols (tin), St. Ives	80	100	—	—	888 0 0	8 0 0—Feb., 1854.
1000 Stray Park and Camborne Vean (copper)	10 1/2	7	5 5 1/2	11 10 0	3 0 0—Oct., 1850.	
256 South Caradon (copper), St. Cleer	2 1/2	320	355 0 0	—	8 0 0	0 0—March, 1855.
6000 South Tamar (silver-lead), Beerlake	11.60.60.	6 1/2	—	—	2 5 0	0 2 8—April, 1855.
256 South Tolgus (copper), Redruth, Cornwall	16	95	—	—	69 0 0	4 0 0—May, 1853.
248 South Wheal Frances (copper), Illogan	37 1/2	370	360 365	276 5 0	10 0 0—March, 1855.	
1024 Trewarke (silver-lead), near Helston	93	—	—	—	5 0 0	0 0—Dec., 1853.
400 United Mines (copper), Gwennap	40	210	—	—	47 5 0	2 0 0—Feb., 1854.
124 Wellington (copper, tin), Perranporth	8 1/2	—	—	—	2 10 0	0 4 0—April, 1851.
7500 Welsh Potosi (silver-lead), Talybont, Card.	2 1/2	—	—	—	2 10 0	0 0—March, 1855.
2500 West Bassel (copper), Illogan	1 1/2	29	—	—	0 11 0	0 1 0—Feb., 1855.
256 West Caradon (copper), Liskeard	20	175	170 175	265 5 0	0 10 0—Feb., 1855.	
256 West Damself (copper), Gwennap	10 1/2	130	10 0	—	23 5 0	0 2 0—March, 1855.
1024 West Providence (tin), St. Erth	5	15	13 1/2 14	23 5 0	1 5 0—Nov., 1854.	
200 West Wheal Seton (copper), Camborne	77	275	—	—	23 5 0	0 0—April, 1855.
1228 Wheal Arthur (copper), Calstock	8	20	—	—	4 10 0	0 10 0—Feb., 1855.
256 Wheal Basset (copper), Illogan	10 1/2	575	560	612 10 0	20 0 0—April, 1855.	
256 Wheal Buller (copper), Redruth	5 1/2	520	—	—	25 0 0—March, 1855.	
1024 Wheal Charlotte (copper), Gwennap	2 1/2	52	—	—	6 16 6	0 10 0—Feb., 1855.
256 Wheal Clifford (copper), Menheniot	6	5 1/2	5	—	5 18 3	0 5 0—Oct., 1847.
572 Trelyon Consols (copper), Redruth	11 1/2	24	—	—	1 3 0	0 5 0—Oct., 1847.
96 Trewavas (copper), Gwennap, Cornwall	9 1/2	160	—	—	1 15 0	1 0 0—Feb., 18